

EXHIBIT 3

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND
(Greenbelt Division)

COLUMBIA GAS TRANSMISSION, LLC, :
Plaintiff, :
v. : Civil Action No.: 8:17-cv-01147-TDC
JANET MALIN HAAS, et al. :
Defendants. :

DECLARATION OF ANDREW KVASNICKA

I, Andrew Kvasnicka, hereby declare under penalty of perjury the following:

1. I am over the age of eighteen and I have personal knowledge of the information set forth below. If called upon to do so, I could testify competently to these matters.
2. I earned my bachelor of science degree in mechanical engineering from Virginia Military Institute in 1991. I am currently employed by TransCanada and provide engineering support for Columbia Pipeline Group, LLC (“Columbia”) as a pipeline engineer and have been so employed for a combined total of eight years. In this capacity, I have worked on numerous pipeline construction, repair, and inspection projects. In my career as a mechanical engineer, I have also worked for Dominion Virginia Power, Kinder-Morgan, Planation Pipeline, and the Virginia State Corporation Commission, in a variety of positions with responsibilities concerning inspection of underground pipelines, easement encroachments, and application of federal regulations to the operation and maintenance of underground utilities.

3. I have worked extensively at Columbia and in other positions in my career with the federal regulations concerning the operation and maintenance of high pressure natural gas pipelines found in 49 C.F.R § 192 *et seq.* I am familiar with the policies for enabling Columbia's compliance with those regulations and I have responsibilities relating to compliance with those policies and the regulations.

4. I have knowledge of and experience with all types of pipeline testing, including ACVG testing, close interval surveys, and methods of leak detection. I also have knowledge of how such testing is done and how to review the results from such testing.

5. The Defendants own certain real property located at 421 Brighton Knolls Drive, Brinklow, Maryland 20862 (the "Property").

6. Columbia operates and maintains within an easement on the Property a 26 inch high pressure natural gas transmission pipeline known as Line MB 26 (the "Pipeline") which is a major source for the delivery of natural gas to Maryland, Pennsylvania, Virginia and Washington, D.C. Safe operation and maintenance of the Pipeline is necessary to maintain a continuous supply of natural gas to these areas.

7. Columbia's predecessor in interest, Atlantic Seaboard Company, obtained the easement on the Property through the Right of Way Agreement attached as Exhibit 3 to the Complaint.

8. Columbia's average daily revenue from the operation of the Pipeline in the area of the Property is approximately \$13,000 per day.

9. The Pipeline was installed in or about 1955 and is approximately four feet below ground.

10. The defendants, Janet Malin Has and Melvin Leroy Haas (the “Defendants”) planted a Red Maple Tree (the “Tree”) in Columbia’s easement on the Property which Tree sits on top of part of the Pipeline.

11. Defendants also planted other trees in the easement and shrubs that are more than five feet tall and that are also on top of the Pipeline.

12. Encroachments such as trees and shrubs that exceed five feet in height and that are within five feet of the Pipeline interfere with required maintenance and inspections of the Pipeline. 49 CFR Part 192, Subpart L, section 192.613 requires continued surveillance of pipelines such as facility patrols (aircraft or walk) and leakage patrols with an instrument. This regulation requires Columbia to continually survey for unusual operating and maintenance conditions.

13. 49 CFR Part 192, Subpart M-Maintenance, sections 192.703-General, 192.705-Patrolling, and 192.706-Leakage Surveys, require that transmission line patrols and leakage surveys must be conducted and that unsafe conditions must be repaired promptly. Section 192.703(a) provides that no person may operate a segment of pipeline, unless it is maintained in accordance with this subpart. Section 192.705 specifically provides that each operator must have a patrol program to observe surface conditions on and adjacent to the right of way for indications of leaks, construction activity, and other factors affecting safety and operation.

14. The Tree, and the other trees and shrubs in the Easement, interfere with the aerial inspections of the Pipeline which is the method of inspection used by Columbia because it provides a more accurate analysis of the Pipeline. Specifically, the Tree covers part of the Pipeline preventing accurate visual inspections and interfering with instruments used as part of the aerial inspection.

15. 49 CFR Part 192, Subpart L, section 192.615(a)(7) requires companies to “make safe any actual or potential hazard to life or property.” Removal and prevention of encroachments may be necessary for the safe repair of pipelines. When encroachments exist, such as the Tree in the present case, Columbia is delayed in accessing pipelines by the time necessary to develop a plan for safely accessing pipelines based on the presence of encroachments, the time necessary to obtain the equipment needed to safely remove the encroachments, and the time to execute the plan with the right equipment. Such delays can cause damage to persons or property and/or a loss of supply of natural gas.

16. Here, Columbia must assume for safety reasons that the Tree’s roots are entangled with the Pipeline and must plan a removal of the Tree that will not cause damage to the Pipeline. The planning and removal process delays access to the Pipeline which in an emergency can lead to damage to persons or property and/or a shutdown of the Pipeline which would affect tens of thousands of people and businesses.

17. Requirements for Corrosion Control for pipelines is set forth in 49 CFR 192, Subpart I which prescribes minimum requirements for protection of metallic pipelines from external and internal corrosion. Sections 192.455 and 192.457 require cathodic protection for pipelines. The cathodic protection of the pipe consists of the protective coating and a low level electric current flowing to a pipeline anywhere there is a break in the coating. The purpose of cathodic protection is to prevent corrosion of the Pipeline that could result in damage to the Pipeline.

18. The Tree interferes with the cathodic protection for the Pipeline because of its close proximity to the pipe.

19. The Tree sits on top of part of the Pipeline. This prevents an accurate close interval survey – a technique used to determine the sufficiency of cathodic protection over a pipeline.

20. For the foregoing reasons, Columbia's Damage Prevention Plan prohibits trees in Columbia Right of Ways and prohibits shrubs that are taller than five feet and requires any shrubs to be at least five feet from the Pipeline. A copy of Columbia's 10/30/2016 Damage Prevention Plan is attached as Exhibit 1. A copy of Columbia's 8/5/2015 Right-of-Way Use Procedure is attached as Exhibit 2.

21. The prohibitions with respect to trees in Columbia Right-of Ways set forth in the attached Damage Prevention Plan and Right-of-Way Procedure have been the policies of Columbia for the time I have been employed by Columbia and have been regularly enforced.

22. The prohibitions with respect to trees in Columbia Right-of Ways set forth in the attached Damage Prevention Plan and Right-of-Way Procedure are consistent with industry standards based upon my 21 years of experience in the industry.

23. The Tree interferes with the safe operation and maintenance of the Pipeline for the reasons set forth in my Expert Report submitted in this case.

24. Internal inspection of the Pipeline through a process called "pigging" - in which a device is sent through the Pipeline to collect data – a Tap was identified on the Pipeline at the same location as the Tree. A Tap is a pipe attached to the Pipeline that was installed to potentially facilitate the distribution of natural gas to the Property. Taps were often installed during the time frame the Pipeline here was placed on the Property.

25. It is Columbia's practice when it learns of the existence of a Tap in a location in close proximity to a home – as is the case here - to investigate further and possibly to excavate

the Tap to make sure that it has been properly abandoned correctly. Otherwise, the Tap can create a hazard to the Pipeline. That is especially true here where the Tap extends to within a few feet of the Tree which sits over top of the Tap.

26. In order to expose and inspect the Tap, the Tree must be removed.
27. For the reasons set forth in my Expert Report submitted in this case, the Easement is fifty feet wide; twenty-five feet on either side of the Pipeline.

Pursuant to 28 U.S.C. 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and information.

Date: 1-2-18

AK

Andrew Kvasnicka

EXHIBIT 1

(DECLARATION OF ANDREW KVASNICKA)

PLAN NUMBER: 220.02.06

PROCESS OWNER: Pipeline Services

Damage Prevention Plan

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Scope

This Plan, along with its related [Plans](#) and [Procedures](#), establishes a damage prevention program for Columbia Pipeline Group (CPG). Common Ground Alliance (CGA) Best Practices are taken into consideration to provide public safety and prevent damages to buried pipeline facilities. Revisions to CGA Best Practices and applicable industry practices are also considered during the annual review.

The Plan applies to all employees, contractors, and third party personnel working on behalf of any Columbia Pipeline Group (CPG) company, hereafter referred to as the Company.

Safety

The Company is committed to public and employee safety. Employees are to perform their duties with the utmost regard for safety at all times. Review all applicable Company safety Plans, Procedures, and Job Hazard Assessments.

Operator Qualification

All persons performing covered tasks shall be qualified according to the Company Operator Qualification Plan. All persons covered by 49 CFR 193 Subpart F shall have successfully completed the LNG Facility Training Plan.

Plans

1. One Call Programs

The Company participates in all applicable state-adopted One Call systems as the primary means of providing public safety and preventing damage to the Company's buried pipeline facilities. All state One Call laws must be followed. If there is a conflict between the applicable state One Call law and a Company Plan or Procedure, the applicable state One Call law takes precedence. One Call Systems International (OCSI) provides the *OCSI Resource Guide*, which includes One Call center contacts and state-specific information. This guide is available from the Common Ground Alliance website at this address: <http://www.cga-onecall.com/map/>. A list of applicable One Call contact information is provided in Attachment A.

The Company will routinely provide the following information to the local state One Call center:

- General locations of pipeline facilities
- To whom and where to submit notifications
- To whom and where to submit emergency notification

Operations Team Leaders (or their representatives) shall annually review, verify, and approve the state One Call centers' electronic mapping for each of that operating area's state One Call member codes, in accordance with Procedure 220.006.011 – *One Call*

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Center Maps – Updating. The One Call Group shall send updates to the appropriate state One Call Center in accordance with the applicable state requirements.

The Company encourages employee participation on state One Call Boards, local Utility Coordinating Councils or Committees, and Damage Prevention Councils or Committees.

1.1. Excavation Contractor Identification

The Company will use the state One Call center to identify persons who normally engage in excavation activities. The individual state One Call center should maintain a current list of these excavation contractors and periodically notify them of the One Call program.

1.2. Excavation Contractor Notification

Plan 230.01.01 - Public Awareness Plan, provides information for notifying and educating the affected public, excavators/contractors, and local public officials (e.g., Planning and Zoning Officials) on topics including but not limited to:

- How to recognize and report gas pipeline emergencies to the Company or appropriate public safety officials;
- How to recognize and report a leak;
- Hazards resulting from a leak;
- Precautions and required notifications if excavation damaged or could have damaged a pipeline
- Proper actions to take if the pipeline is leaking,
- Pipeline markers; and
- How to notify the state's One Call center before any digging, blasting, or crossing with heavy equipment.

The Company's brochure, "*Minimum Guidelines for Construction Near Natural Gas Pipeline Facilities*", is used to inform those planning construction or excavation-related activities in the vicinity of a Company pipeline facility of the Company's specific requirements.

When an excavation contractor contacts the Company directly concerning its intent to perform proposed excavation, the Company shall refer the contractor to the One Call state law and the applicable state notification requirements. The Company may choose to respond to the request and document the Company's response using Form 1050-PI7 (see Attachment B).

A national "Call Before You Dig" number (811) was created to help protect excavators from unintentionally hitting underground utility lines while digging. The Company promotes the "Call 811" message ("Safe digging is no accident. Know what's below. Call 811 before you dig.") by placing bumper stickers and/or license

plates on vehicles; equipment; signage at M&R, compressor and other fenced facilities; and on pipeline markers (See *DS.220.010 - Signage Requirements*).

2. Excavation (One Call) Notifications

2.1. Receiving Notifications

The Company Monitoring Center - One Call Group ("One Call Group") utilizes the IRTA application to receive automatic One Call notifications ("One Call tickets") from the state One Call centers. The state One Call center should assign a unique reference number or ticket number to each One Call ticket. Each One Call ticket received from the state One Call center shall be reviewed and analyzed by the One Call Group to determine whether the Company's pipeline facilities are involved with the proposed excavation activities.

2.2. Processing Notifications

The One Call Group will "clear" the ticket if the Company is not involved with the proposed excavation. If the proposed excavation is within the safe excavation boundary (generally 500 feet on each side of the buried facility, for a total of 1,000 feet) based on mapping information, the ticket will be assigned to the appropriate Company field location to investigate. Where accurate information and/or land-based maps are available, the One Call Group will generally clear tickets outside the 1,000-foot corridor. If a One Call ticket is received that is vague, incomplete, or contains questionable information, the One Call Group will forward the ticket to the appropriate field location to further investigate the Company's involvement.

The Company recognizes the need to provide reliable services to our customers and maintain protection of its facilities when One Call tickets are received outside of normal working hours. One Call tickets received after normal working hours (including weekends and holidays) will be processed by the One Call Group, and the appropriate Company response will be taken.

One Call tickets or correspondence from an excavator for projects where additional information or a meeting is requested will be appropriately processed by the One Call Group.

2.3. Investigating Notifications

Overview

Once the determination has been made that the Company's facilities may be involved, the Company shall either locate and mark the pipeline facilities within the timeframe specified by the state One Call law or contact the excavation contractor to arrange a pre-excavation meeting within the required timeframe.

Once the investigation is complete, the excavation contractors, landowners, Company personnel, and/or other personnel in charge of the work adjacent to the pipeline or facilities shall be fully informed of the pipeline location and be given the appropriate Company emergency telephone number, local contact information, One Call center number (or 811), and the number for local emergency officials.

Investigation Requirements

Company employee or representative shall respond in accordance with *Procedure 220.006.001 – Field Investigating and Reporting One Call Notifications Procedure* by:

- **Visually investigating the One Call ticket to determine the Company's involvement**

- **Marking any underground Company facilities, in accordance with Procedure 220.006.002 - Locating, Marking, Exposing, and Identifying Underground Pipeline Facilities.** Typically, Operations will designate employee(s) to be responsible for marking Company facilities.

When locate marks are moved, removed, damaged, covered up, or tickets have expired, the excavator should request that the excavation site be re-marked by submitting a new call to the state One Call center.

- **Identifying all access points and potential hazards in the vicinity.**

- **Identifying Company facilities that may not be accurately mapped.**

If an employee or Company representative becomes aware of errors or omissions in the maps, drawings, or records used while locating a Company facility, they must notify Technical Data & Design (TD&D) using *Form 847 CE4 CSD - Map Correction* (Attachment C) within 90 days of discovery. TD&D will revise and provide a copy of the map or drawings to the Operations Team Leader responsible for the facility location, according to the requirements in *Plan 200.01.01 - Pipeline Facility – As Built Records*. A copy of the red-marked map, sketch, and/or drawing may be used by local Operations to locate facilities until a new map and/or drawing is available. The One Call Group shall provide updated information to the state One Call center, as required by the applicable state requirements.

- **Conducting a pre-excavation meeting (optional)**

For large and/or complex projects, One Call investigation may include a pre-excavation meeting with the excavation contractor to clearly identify the boundaries of the proposed excavation, discuss the nature and duration of the excavation, build a relationship with the excavation

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contractor, and achieve an understanding of the roles and expectations of all parties during the excavation project.

If employee or Company representative and the excavation contractor come to an agreement that is different from the state mandated timeframe for marking facilities, these roles and expectations will be documented on the 1050-P17 Form. Items to document include, but are not limited to:

- When will the line be marked
- Who to contact to request marking
- How much notice will be given
- Contact information of parties involved

This documented understanding can be used for large excavation projects, where marking the entire project all at once would necessitate repeated remarking.

Documentation

Appropriate Operating/Company Personnel shall document the Company's One Call response activities, by:

- **Reporting the Company's response (IRTH System Entry)**
The IRTH system is the Company's official means of maintaining a record for a One Call investigation. A positive response should be made to all One Call tickets. Positive response varies from state-to-state and could include contacting an excavator or emailing, calling, or electronically notifying the One Call center. (One Call center notifies the excavator.)
- **Completing Form 1050-P17, as applicable (see Procedure 220.006.004 – Location of Buried Facilities (1050-P17) - Form Completion).**
The excavation contractor, landowner, or other on-site representative, should receive a copy of the completed form.
- **Photographing/taking video of the construction areas (recommended)**
On-site employee or Company representative should consider taking photographs or video of the construction areas, showing the markers placed after the utilities are located, the proposed excavation route, etc., to provide documentation in the event that damage occurs or is claimed to have occurred due to improper marking, failure to mark the pipeline, or because the markings were moved, removed, or covered up.
- **Reporting any errors or discrepancies in the information provided in the One Call notification to the state One Call center and the One Call Group.**

2.4. Emergency Locates

Emergency excavation, maintenance, or repair made on Company property by or on behalf of the Company may be conducted immediately, provided that the proper notification to the state One Call center is made as soon as reasonably possible but no later than the next working day. Emergency locates not on Company property shall follow the applicable state One Call law.

When the Company receives an "Emergency" locate request from a state One Call center, Company employees shall respond in accordance with the applicable state One Call law.

3. Markers and Marking Standards

The markers and marking standards used under this Plan must comply with all state and local One Call requirements. Company facility markers and marking requirements are discussed in *Plan 220.02.04 – Pipeline Markers and Facility Identification Plan* and *DS.220.010 – Signage Requirements*. Some state One Call agencies have developed marking standard guideline manuals to assist in understanding the state One Call marking requirements. The appropriate CPG Company shall be identified when marking with flags, paint, whiskers, or as indicated by applicable state One Call requirements (e.g., Ohio requires excavation to be marked in white and include "TCO" for Columbia Pipeline Group, "CR" for Crossroads Pipeline System, or "CMG" for Columbia Midstream Group.)

CGA Best Practices, Appendix B, provides recommended marking standards that should be considered if state marking standards are unavailable. The most current version of the CGA Best Practices is available at commongroundalliance.com.

The Company uses the APWA uniform color code (ANSI Z535.1) for marking excavation sites and underground facilities. The standard color for marking natural gas lines is High Intensity Yellow. The standard color for marking corrosion cables and associated corrosion facilities is Safety Red. Company facilities should be adequately marked for conditions (e.g., rain, snow, vegetation, traffic, construction activity, etc.), using techniques or devices that may include one or more of the following: paint, chalk, flags, stakes, brushes, or offsets. Markings should extend beyond the white lined/identified excavation site. In situations where more than one pipeline exists in the right-of-way, the corridor or approximate width of the right-of-way shall be marked and each pipeline in the right-of-way shall be marked.

Temporary Markings for Underwater Facilities:

Consider using temporary markers (buoys, poles, or PVC markers) to indicate the presence of any underwater facilities in proposed excavation areas. Excavating activities where use of temporary markers should be considered includes: dredging, bridge construction, setting of anchors, and directional boring. Use such markings only if they can be placed without being exposed to or creating additional hazards. The markings

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should be placed as close as practical over the submerged facilities at risk. Placement and removal of temporary markers for underwater facilities shall follow applicable local, state, and federal laws and regulations. These markers may be supplemented with mapping, GPS coordinates, and/or fixed high bank marks.

The proper placement of visible temporary markers raises the awareness of these facilities and reduces likelihood of damage. The Company should establish communication between stakeholders through the One Call center to reduce potential conflicts. Communication shall be maintained during the excavation to ensure the safe and successful completion of the project.

4. Interruption of Service - Company Facilities

In the event service from Company facilities will be either permanently or temporarily interrupted during an excavation activity, Operations personnel shall work with the appropriate representatives from Gas Control and other Company representatives, the excavator, foreign utilities, and other affected parties to coordinate the interruption of services. The Company may receive a request from a state One Call center to conduct a meeting or conference call to discuss pre-planning activities where an interruption of service from Company facilities is involved.

5. Facility Protection

5.1. Impacts from Design and Construction of Facilities

Impacts from the proposed design and construction of facilities along Company rights-of-way are discussed in *Procedure 220.003.009 – Right-of-Way Use Procedure*. Permittee, as described in this Procedure, shall be instructed to call when planning to excavate, move, blast or operate heavy equipment in close proximity to buried pipelines or facilities.

5.2. Design and Construction Guidance

To ensure safety and pipeline protection, the Company works proactively with landowners, utility owners, contractors, subcontractors, real estate developers, brokers, and agents and others in the planning stages of proposed modifications, developments, or other construction activities that could impact Company facilities or rights-of-way. *Procedure 220.003.009 – Right-of-Way Use Procedure* provides a consistent set of engineering requirements to help reduce risk of damage to company pipeline facilities; ensure unencumbered access to rights-of-way and related pipeline facilities; provide maximum use of workspace for routine maintenance, future inspection, and/or repair work; and enable effective corrosion protection of pipeline facilities.

As further described in the *Procedure 220.003.009 – Right-of-Way Use Procedure*, all construction activities and projects that are proposed on or near

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Company pipeline rights-of-way are subject to formal review by the Company. Depending on the scope of the project and its impact on Company rights-of-way and pipeline facilities, additional engineering requirements and protective measures may be required. A copy of the Procedure is provided to those who propose projects that could impact Company pipeline right-of-way.

The Permittee and affected Company representatives should carefully review Procedure 220.003.009 to ensure understanding of and compliance to the specific requirements, including but not limited to:

- **Blasting and Seismic Data Activities** - See also *Procedure 220.006.006 - Seismic Survey Analysis* and *Plan 220.03.01 - Facility Patrol and Leakage Inspection*. (For liquids lines, see *Plan 400.017.419 Inspection of Right of Way*).
- **Road and Railroad Crossings**
- **Utility Crossings** - During excavation, Company employees shall pay particular attention to the following:
 - Possible coating damage, dents, gouges, scratches, or other damage that could be caused by the excavation.
 - Damage to the cathodic protection system.
 - Removal of pipe supporting material which could create excessive stress on the pipeline.
 - Damage caused by heavy equipment on top of or crossing the pipeline.
 - Electrical isolation of metallic underground utilities. Local Company corrosion personnel should determine if cathodic protection interference is anticipated or if test leads need to be installed on both facilities. For additional information, see *Plan 70.01.01 - External Corrosion Control*.
- **Trenchless Excavation (Directional Drilling, Jacking, Boring Activities)** - The location of the Company's pipeline facilities at the entrance pit, along the trenchless excavation path, and at the exit pit shall be included when notifying the state One Call center and shall be indicated on Company *Form 1050 P17 - Location of Buried Facilities*, when responding to a One Call notification.
- **Mining Activities** – See *Procedure 220.006.007 - Mining Activity Affecting CPG Facilities*.
- **HCA - Special Requirements** - Within an HCA, a Company representative must be on-site during all excavation activities across the pipelines, regardless of the depth of the excavation. In addition, should evidence of an excavation (regardless of depth) be discovered near a pipeline in an HCA where there was no monitoring, the area must either be further

evaluated in accordance with *Procedure 220.003.011 – Direct Investigation of Unmonitored Activities on the Right-of-Way*, or an above-ground survey must be performed using methods defined in NACE RP-0502-2008 - *Standard Practice - Pipeline External Corrosion Direct Assessment Methodology* to determine whether there has been damage to the pipeline.

5.3. Reimbursable Cost

At its discretion, the Company will seek reimbursement from landowners, contractors, developers, governmental agencies, or others for all costs associated with third-party damage prevention that extends beyond its Damage Prevention Program.

5.4. Company Project Requirements

Survey and Design

The Company employs specific surveying standards, requiring the location of all existing utilities that will affect a pipeline right-of-way or facility be identified on a project survey. The presence and extent of any existing easements, rights-of-way, and existing buried facilities should be identified in the survey when the scope of the project requires this information.

Company designers will use all reasonable means of obtaining information about underground facilities in the areas of the planned excavation when planning and designing a project, including but not limited to: applicable industry codes, operating and design standards, mapping standards, design criteria, design data, design input data, information on foreign utility operators, and field reconnaissance, as required. The Company employs qualified designers and, when necessary, a Subsurface Utility Engineering provider who has knowledge and understanding of applicable CGA Best Practices and the ASCE 38-02 SUE Subsurface Utility Engineering Standard.

Both the designer and the contractor working on a project should be knowledgeable regarding the quality of the information included on the plans.

Planning Phase

During the planning phase of the project, the following information should be shown on the preliminary design plans/drawings:

- Existing facilities (including active, abandoned, out-of-service, and proposed), including possible routes for the project
- Information that may have been gathered from field facilities, underground facility surveys, or subsurface utility engineering
- Elevation

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- When applicable, a summary drawing showing the proposed facility route or excavation, including streets and a locally accepted coordinate system.

Design plans shall be distributed to the involved parties, local operating personnel, and Land Agents to provide the opportunity to furnish additional information, clarify information, or identify possible conflicts in the proposed project. Owners/operators of affected facilities and local operating personnel may also be contacted and provided the opportunity to provide feedback on a proposed project.

Facility Marking

A combination of above-ground and below-ground markers should be considered to assist in identifying and locating underground facilities in the future see *Plan 220.02.04 – Pipeline Markers and Facility Identification Plan* and *DS.220.010 – Signage Requirements*).

The purpose of above ground markers is to identify underground facilities, not to locate for excavation or to circumvent the One Call process. By including this measure in the design of underground facilities, it may reduce the risk of incorrectly marking the underground facility during future locates.

Above-ground markers should include the Company name, type of facility, emergency contact, and the One Call number. The locations and types of markers should be specified in the construction plans. The marker system should include, but not be limited to: stream crossings, public road crossings, other facilities' rights-of-way, railroad crossings, heavy construction areas, and any other location where it is necessary to identify the location of underground facilities. If non-detectable facilities are being installed, the design should include a means to accurately locate the facility from the surface. Road decals, stencils, tracer tapes, electronic markers or other appropriate systems may be used for this purpose. If a facility is color-coded, it shall be in accordance with the APWA guidelines.

Contractor Communication

Contractors bidding on Company projects are required to attend a pre-bid meeting that discusses the particular facilities in the area and the requirements to protect, support, and safely maintain the facilities during excavation. Official minutes should be taken and distributed to all attendees. Local underground utility facility owners or operators may also be invited to the pre-bid meeting. If a contractor is not able to attend a pre-bid meeting, they are required to provide written documentation that they conducted their own on-site review as discussed in this Section.

The Company or its designee shall maintain communication with contractors during the pre-bid process and throughout the remainder of the project. The Company shall appoint a Design Engineer to each project who is responsible for

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reporting to the Project Manager. A representative of the Project Team shall be responsible for preparing and recording information on the as-built drawings that may be used in future excavations or locates of a Company pipeline facility.

6. Monitoring Excavation Activities near a Company Pipeline

A Company representative shall be present during excavation within the rights-of-way except for certain utility crossings, as described in Procedure 220.006.002 – *Locating, Marking, Exposing, and Identifying Underground Pipeline Facilities*. Whenever the Company has knowledge that any portion of a pipeline is exposed during excavation, a Company representative shall generate and complete a work order in its work management system for “Pipe Inspection and Reporting”, in accordance with Procedure 70.001.002 - *Pipeline Inspection Procedure*.

Before any excavation begins, all Company personnel and/or contractors shall be aware of the requirements in *Plan 110.01.13 - Trenching and Excavation Requirements* and *Plan 110.01.11 - Confined Space Entry Management Plan*.

6.1. Locating and Exposing a Company Pipeline

General

Procedure 220.006.002 – *Locating, Marking, Exposing, and Identifying Underground Pipeline Facilities* shall be followed. Company personnel, including those observing contractor or third party excavators, shall be qualified in PLOQ.0072 – *Determine Damage Prevention Requirements for Pipeline Facilities*. Company or contract employees shall also be qualified under the DOT Operator Qualification tasks referenced in the Operator Qualification Tasks Section below.

The proper tools and equipment shall be used for any excavation project.

Consideration shall also be given to:

- **The condition of the excavation equipment** used in exposing pipelines. The Company representative should make sure the equipment is in safe and reliable working condition.
- **The qualifications of the heavy equipment operator**, whether Company or contractor personnel. The equipment operator shall be properly trained and experienced in the operation of the type of equipment being used in the excavation.

The Company representative will ensure all safety and environmental rules and regulations (Federal and State) relating to the protection of underground facilities are followed by all Company and contractor personnel while working on Company property.

Visually Locating the Pipe

Visual location of the pipe shall be accomplished using potholing techniques under the direct supervision of a Company representative and in accordance with all requirements outlined in Procedure 220.006.002 – *Locating, Marking, Exposing, and Identifying Underground Pipeline Facilities*

State One Call or underground utility damage prevention laws govern the minimum distance (commonly known as a tolerance zone) where potholing techniques shall be used. To provide a clear and consistent process for all states in which the Company operates, potholing techniques shall be used within 24" (2 feet) of the outer edge of the pipe. This "tolerance zone" extends on all sides of the pipe or underground facility.

Mechanical means of potholing (using power excavation equipment other than air cutting or vacuum techniques) are inexact, and even a skilled equipment operator runs the risk of damaging a pipeline. Therefore, mechanical methods of digging holes are not approved within the tolerance zone and are not allowed by most state One Call laws. Refer to Procedure 220.006.002 – *Locating, Marking, Exposing, and Identifying Underground Pipeline Facilities* for additional information on potholing procedures.

Exposing the Pipe:

After the location of the pipeline has been initially determined, the pipe shall be exposed following all requirements described in Procedure 220.006.002 – *Locating, Marking, Exposing, and Identifying Underground Pipeline Facilities*. A protective bar across the backhoe teeth shall be used to prevent an accidental puncture or gouge of the pipeline.

6.2. Protection of Above Ground Facilities

The use of powered equipment near above-ground or exposed facilities may increase the likelihood of damage to those facilities. To decrease the potential for damage, Company locations shall consider installing temporary or permanent pipeline markers at above ground facilities (e.g., valve settings):

- To protect the facilities during inclement weather conditions, such as flooding or significant snow accumulation
- During construction or excavation activities to enhance the presence of pipelines in the vicinity, or
- Under other conditions where the facilities may not be visible with a typical pipeline marker.

Taller pipeline markers, referenced in *DS.220.010 – Signage Requirements*, may be considered to ensure facilities are adequately protected. Physical barriers, posts, "Jersey" barriers, fencing materials, etc. are other alternatives available to

protect Company facilities. Employees or contractors should take into consideration the correct tools and/or possible use of an escort or spotter when plowing or blowing snow, mowing, or carrying out other activities where facilities may not be visible.

7. Company Excavation Activities

All applicable sections of this Plan shall be followed when excavation activities are conducted by the Company. Excavation near a pipeline facility shall follow Procedure 220.006.002 – *Locating, Marking, Exposing, and Identifying Underground Pipeline Facilities*.

7.1. Personnel Requirements

For the purposes of this section, “Personnel” refers to the person or persons (whether Company or contractor) responsible for performing or coordinating excavation activities on Company property or right-of-way on behalf of the Company. Personnel who excavate on and near Company facilities shall possess the qualifications necessary to conduct such activities in a manner that is skillful, safe, and reliable. Using qualified Personnel serves to protect the public, preserve the integrity of underground facilities in the vicinity, and ensure that contractors employ safe work habits and are capable of performing the requested work.

Personnel who conduct excavation activities for the Company shall comply with all applicable state One Call laws.

7.2. One Call Notifications

The state One Call system shall be notified before any excavation activities, per the state One Call laws. Except for emergencies, no Company or contractor personnel excavating on behalf of the Company shall commence an excavation before the required state One Call notification period.

The area of the excavation shall be marked with white paint, flags, whiskers, color-coded brush-type markers, stakes, or a combination of these to outline the dig site before notifying the state One Call center. Unless otherwise specified by state requirements, calls to the state One Call center shall be at least two (2) working days and not more than ten (10) working days before excavation is scheduled to begin.

The Company representative responsible for coordinating or performing excavation activities is responsible for giving accurate location information to the One Call center. This information may include, but is not limited to:

- Street address, street intersection, legal description, or other acceptable One Call format and latitude/longitude if feasible.
- Approximate starting and ending point

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- Side of the property (e.g., North, South, East, West, front, back, etc.).

If this criterion cannot be met, direct latitude/longitude coordinates or other criteria as prescribed by the state One Call center shall be utilized.

On larger-scale projects occurring over an extended period, a minimum number of locates should be requested to limit the number of request updates needed for the duration of a project. Locate updates should not occur after all the excavation covered by a locate request is completed. Communication between contractor and Company personnel during such a project is essential to accomplishing this.

In the event the Company or a foreign utility or pipeline operator fails to locate the utilities in the area of the proposed excavation (e.g., facilities not located within state-required timeframe or facility owner/operator provides notification that facility cannot be marked within the timeframe and a mutually agreeable marking date cannot be arrived at) personnel shall place a new call into the One Call center to have the area marked before proceeding with excavation.

7.3. One Call Documentation

Personnel placing the call to the state One Call center should receive a unique reference number or ticket number from the One Call center. The designated competent person on-site shall maintain a log of the One Call ticket number(s). A record of the locate request details and documentation shall also be maintained on-site to provide location, extent of the work, valid start time, and pipeline operators notified as result of the planned excavation.

Personnel should consider taking photographs or video of the construction areas showing the markers placed after the utilities are located, the proposed excavation route, etc. in the event damage occurs or is claimed to have occurred due to improper marking, failure to mark the pipeline, or because markings were moved, removed or covered up. Locate marks which become moved, removed, damaged, or covered up shall be replaced by submitting a new One Call to the state One Call center.

In situations where multiple excavators are working at the same job site, each excavator must obtain their own One Call ticket(s) before excavation begins to ensure that the specific areas have been appropriately marked. The only exception is if a contractual agreement designates a single contractor as being responsible for placing all One Call notifications and coordinating and supervising all excavation activities.

7.4. Pre-Excavation Meeting

A pre-excavation meeting, as discussed in Procedure 220.006.002 – *Locating, Marking, Exposing, and Identifying Underground Pipeline Facilities*, shall be

considered for planned Company excavation activities to clearly identify the boundaries of the proposed excavation, discuss the nature and duration of the excavation, and discuss safety concerns or other issues that may be relevant to protecting the Company facilities during excavation. A pre-excavation meeting should be used to discuss excavation activities that require temporary or permanent interruption of the Company's facilities, foreign utilities, or other pipeline operators that may be affected.

7.5. Large/Complex Project Coordination

Large and/or complex projects may require the use of project-specific processes, established to enhance safety and coordinate buried facility damage prevention efforts among all potentially affected stakeholders. Such processes are intended to complement and be used in addition to standard and customary One Call notification and locating practices.

A "large/complex" project is a single project or series of smaller related projects that will impact facilities over a long period of time and/or a large area. Such projects pose a unique set of safety and damage prevention challenges when using standard One Call practices, particularly related to ongoing locating and re-marking requirements. These unique challenges can be addressed by developing specific procedures including, but not limited to: a method for identifying such projects; pre-planning and design coordination; increased One Call center involvement; a formalized communication process; and project-specific marking agreements.

7.6. Common Trench Construction

For facilities buried in a common trench, a minimum of 12-inch radial separation should be maintained between facilities such as pipelines, plastic gas lines, fuel lines, and buried electrical supply lines. If 12 inches of separation cannot be feasibly attained at the time of installation, then mitigating measures should be taken to protect lines against damage that might result from proximity to other facilities. Examples of mitigating measures include insulators, casing, shields, or spacers. If there is a conflict among any of the applicable regulations or standards regarding minimum separation, the most stringent should be applied.

7.7. Marking Newly Installed Facilities

New facilities shall be marked in accordance with Company Design Standard *DS.220.010 - Signage Requirements* as soon as possible after installation. In areas of continuing excavation, newly installed facilities can be damaged and safety compromised if the facilities are not marked. Marking new facilities upon their installation provides notice to excavators of a facility that may not otherwise be marked in response to a One Call.

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Warning tape shall be placed over the pipe whenever a pipeline is being installed or replaced. A minimum 6-inch wide tape that follows A.P.W.A. Uniform Color Code, shall be placed directly above the buried pipeline where possible. The tape will be buried at least 1 foot below the surface of the ground and at least 1 foot directly above the pipeline. The only exception is for trenchless installation.

8. Unmonitored Activity on the Right-of-Way

Any evidence of suspected unauthorized and/or unmonitored activity on the right-of-way outside of a normal One Call or other notice of excavation shall be investigated and documented in the Company's work management system, using *Procedure 220.003.011 – Direct Investigation of Unmonitored Activities on the Right-of-Way*.

9. Pipeline Damage and Near Misses

9.1. Reporting Pipeline Damage

Initial Response

Pipeline damage may include pipeline breaks, significant leaks, nicks, dents, gouges, grooves, or damage to above ground appurtenances, lines, conduits, coatings, or cathodic protection. As soon as pipeline damage is determined or discovered, it shall be immediately reported to the Monitoring Center (at 1-800-835-7191 or 1-866-485-3427) or the foreign pipeline operator at the emergency numbers posted on nearby pipeline markers. In addition, if damage to a Company or foreign pipeline results in the release or escape of natural gas or if it will endanger life, health, or property, Company personnel or representative must move a safe distance from the release and immediately notify 911 or Public Safety Answering Point (PSAP).

Personnel shall also take measures to protect themselves and other bystanders, property, and the environment until the facility owner (Operations), operator, or local emergency responders arrive on scene, complete their assessment, and declare the area safe.

Abnormal Operation Reporting

Operations personnel shall gather information, as required by *Procedure 220.005.010 - Abnormal Operation Reporting - Third Party Damage or Near Miss to Pipeline Facility* and the appropriate Abnormal Operations Reporting Procedure from the list below:

For Gas and Liquid:

Procedure 220.005.005	<i>Abnormal Operation Reporting- Valve Closure or Shutdown Procedure</i>
Procedure 220.005.006	<i>Abnormal Operation Reporting- Increase or Decrease in Pressure or Flow Rate Outside of Normal Operating Limits</i>
Procedure 220.005.007	<i>Abnormal Operation Reporting- Unintended Loss of Critical Communications</i>
Procedure 220.005.008	<i>Abnormal Operation Reporting- Operation of a Safety Device</i>
Procedure 220.005.009	<i>Abnormal Operation Reporting- Malfunction of a Component, Deviation from Normal Operation, or Personnel Error</i>

Safety Related Condition Reporting

If any pipeline damage is discovered and such damage (1) constitutes a material defect or physical damage that would impair the serviceability of a pipeline that operates at a hoop stress of 20% or more of its SMYS, or (2) could lead to an imminent hazard (either directly or indirectly by remedial action by the Company) and causes a 20% or more reduction in operating pressure of a pipeline that is within 220 yards (660 feet) of a building intended for human occupancy or outdoor place of assembly or within the right-of-way of an active railroad, paved road, street, or highway, this may be a Safety Related Condition (SRC). Refer to *Plan 220.05.02 – Safety Related Conditions – Reporting and Investigating Requirements* (for natural gas and liquids). An SRC must be reported within 5 working days after determination that the condition exists but not later than 10 working days after discovering the condition (not including Saturday, Sunday, or Federal Holidays).

9.2. Documentation of Pipeline Damage

The Company electronic database will be used to store records for pipeline damage and near misses. Records following CGA Damage Information Reporting Tool (DIRT) Field Form are collected when pipeline damage or a near miss situation occurs. If all information is not available, the most complete information available is collected. When applicable, the records are updated to reflect changes in a state statute, evolution in industry technology, or awareness of the root cause. See CPG Plan 225.01.01 - *Integrity Management Plan* for additional information on entering records in the CGA DIRT program. Records from CGA DIRT are available to independent organizations, such as a Damage Prevention Committee, for purposes such as improving local damage prevention awareness.

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The states of New Jersey and West Virginia require annual reporting of damages that occur to the Company's pipeline facilities.

Excavation-related events shall be reviewed annually by the Public Awareness Program Steering Team to determine if changes are needed to the Company's Public Awareness Program and by Engineering Services – Integrity Management to ensure preventive and mitigate measures are implemented as appropriate.

10. Quality Assurance

To monitor the Company's Damage Prevention Program effectiveness, random spot assessments of the Company Life Saving Rule, *Locating, Marking, & Exposing Pipeline Facilities* will be conducted by a Team Leader or designee. This assessment is conducted to ensure applicable Procedures are understood, being followed, and are effective. The observer shall have been trained in the Company Life Saving Rule, *Locating, Marking, & Exposing Pipeline Facilities* and have knowledge of damage prevention requirements.

Assessments are documented using *Procedure 220.006.009 - Life Saving Rule - Locating, Marking and Exposing Pipeline Facilities*. Engineering Services – Integrity Management will analyze the information provided by this assessment and determine if improvements to the Company's Damage Prevention Program or Public Awareness Program are necessary. Results of the assessments should be communicated to Company employees, when necessary.

Additional training shall be provided when it is discovered that a Company or contract employee does not understand and/or is not following applicable Company Plans or Procedures. If necessary, a Company or contract employee shall be re-qualified in accordance with the DOT Operator Qualification Plan. When a need for correction to a Company Plan or Procedure is discovered, the person making the discovery should communicate recommended changes in writing to the Standards & Procedures Department. Entering a Service Request into the Company's work management system and assigning the request to Standards & Procedures is the preferred method of communicating necessary corrections.

The Company may consider emerging technologies such as GIS, GPS, location technology, orthographic and satellite images, and other technologies to develop improvements to its damage prevention program.

The Company encourages employee participation in local Utility Coordinating Committees to communicate with other utility facility owners and pipeline operators concerning current/future projects and to gain insights on possible ways to improve the Company's Damage Prevention Program.

Responsibilities

Operations Personnel

For the purposes of this Plan, "Operations Personnel" are those internal employees with proper operator qualifications, approved by the local Operations Team Leaders and/or Operations Managers to perform locates. Use of temporary/contract employees who are properly qualified and have the proper operator qualifications will be considered on a case-by-case basis with approval of the specific operating area's Regional Director.

Operations personnel are responsible for:

- **One Call Investigation:** Locating pipeline facilities, meeting excavation contractors on-site when necessary to coordinate excavation activities, completing all required response and investigation documentation, and verifying the accuracy of maps and records when locating facilities. Where maps and/or records are found to be deficient, Operations personnel provide the correct information to TD&D.
- **One Call Notification:** Notifying the appropriate state One Call center of planned Company excavations.
- **Public Awareness Program(s) Participation.** (see *Plan 230.01.02 - Public Awareness Program*)
- **Providing excavation contractors a copy of the "Minimum Guidelines for Construction near Natural Gas Pipeline Facilities".**
- **Quality Assurance:** Conducting unannounced reviews of the Company's locating, marking, and exposing pipeline practices.
- **Cathodic Protection Evaluation:** Local corrosion personnel are responsible for determining the effects of cathodic protection interference when the Company's underground facilities are crossed with a metallic foreign utility.

One Call Group

The One Call Group is responsible for providing information to the state One Call center. They are also responsible for reviewing and processing excavation notifications received from each state One Call center.

Engineering Services – Integrity Management

Engineering Services – Integrity Management is responsible for maintaining the Damage Prevention Plan to reflect changes in regulatory requirements through periodic review and evaluation, complying with the related requirements of CPG's *Plan 225.01.01 - Integrity Management Plan*, complying with any state reporting requirements, and managing the Quality Assurance requirements described herein.

Engineering Services – Pipeline Engineering

Engineering Services – Pipeline Engineering is responsible for reviewing, analyzing, and approving proposed blasting/seismic activity, road and railroad crossings, mining activity, and some directional drilling/boring activities. Also responsible for providing additional technical support as needed.

Land & Natural Resource Permitting

Land & Natural Resource Permitting is responsible for providing the necessary support required for the excavation activity.

Technical Data & Design

Technical Data & Design (TD&D) is responsible for maintaining maps and records and making corrections to them where warranted.

Project Teams

Chief Inspectors or designees are responsible for:

- Ensuring Company pipeline facilities are adequately located and marked prior to starting any excavating activities, including One Call notifications.
- Meeting with the excavation contractors and operating personnel on-site to coordinate excavation activities, when necessary
- Ensuring all required documentation (One Call notification and/or Company work management system) is completed.
- Verifying the accuracy of maps and records when locating facilities and, where these records are found to be deficient, providing correct information to TD&D.
- Conducting unannounced reviews of the Company's locating, marking, and exposing pipeline practices in conjunction with a construction project.

Project Teams are also responsible for:

- Ensuring that contractors either attend a pre-bid meeting or submit required written documentation as provided in this Plan.
- Ensuring communication is maintained with contractors and the Company throughout the construction project.
- Ensuring that a design engineer is assigned to each project.
- A representative of the Project Teams shall also be responsible for preparing and recording information on the as-built drawings.

Documentation Requirements

Always refer to the Company's [Records Management Policy](#) and [Retention Schedule](#) for guidance on record retention requirements, as requirements may exceed the PHMSA or other regulatory requirements. Address any questions regarding retention requirements to Records Management at recordsmanagement@cpg.com.

Applicable PHMSA retention requirements are listed below for reference only.

Record/Form Name/Use	Storage Location	Retention Requirement
One Call Ticket Management Database (Store all Company One Call responses)	Irthnet	
"Investigate One Call" Work Order (Record Company actions taken while investigating a One Call ticket)	Company Work Management System	
Form 1050-P17 - Location of Buried Facilities (Document field data and actions when activity occurs on or adjacent to Company right-of-way)	Local Office (original) (scan and attach with Company Work Management System)	NJ – 7 years DE – 6 years All other states 5 years plus current year
Form 847 CE 4 CSD - Map Correction (Report errors or omissions in maps, drawings, or records used in locating a Company facility.)	TD&D Office	Life of Facility
Videos, photos, and other records used to locate pipeline.	Company's Work Management System (OR with Form 1050-P17)	5 years plus current year
One Call Center Database Verification (Document Company review, verification, and approval of One Call Center's geographical description database.)	Company's Work Management System	5 years plus current year
Road Crossing/Railroad Crossing/Blasting Plan Responses (Including all analysis and response letters.)	Local Office (with Form 1050-P17)	5 years plus current year
Pipe Inspection Documentation	Company's Work Management System	Life of Facility

References

Related Plan Documents

Plan Number	Title
70.01.01	<u>External Corrosion Control</u>
80.01.01	<u>DOT Operator Qualification Program</u>
110.01.13	<u>Trenching and Excavation Requirements</u>
200.01.01	<u>Pipeline Facility – As Built Records</u>
220.02.04	<u>Pipeline Markers and Facility Identification Plan</u>
220.05.02	<u>Safety Related Conditions – Reporting and Investigating Requirements</u>
220.05.03	<u>Abnormal Operations</u>
220.02.09	<u>Encroachment Plan</u>
220.03.01	<u>Facility Patrol and Leakage Inspection</u>
225.01.01	<u>Integrity Management Plan</u>
230.01.01	<u>Public Awareness Plan</u>
230.01.02	<u>Public Awareness Program</u>
400.017.434	<u>Abnormal Operations</u>
400.017.501A	<u>DOT Operator Qualification Program (Liquid)</u>
400.017.419	<u>Inspection of Right-of-Way</u>

Related Procedure Documents

Procedure Number	Title
70.001.002	<u>Pipe Inspection Procedure</u>
220.003.009	<u>Right-of-Way Use Procedure</u>
220.003.011	<u>Direct Investigation of Unmonitored Activities on the Right-of-Way</u>
220.006.001	<u>Investigating One Call Notifications</u>
220.006.002	<u>Locating, Marking, Exposing, and Identifying Underground Pipeline Facilities</u>
220.006.003	<u>Blasting Analysis</u>
220.006.004	<u>Location of Buried Facilities Form (1050-P17) Completion</u>
220.006.006	<u>Seismic Survey Analysis</u>
220.006.007	<u>Mining Activity Affecting CPG Facilities</u>
220.006.009	<u>Life Saving Rule - Locating, Marking and Exposing Pipeline Facilities</u>
220.006.011	<u>One Call Center Maps – Updating</u>

Related Design Standards

Design Standard Number	Title
DS.220.010	<u>Signage Requirements</u>

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Operator Qualification Tasks

CPG Op Qual Task	Title
PLOQ.0026	<u>Locate Underground Pipeline Facilities</u>
PLOQ.0027	<u>Mark Pipelines and Above Ground Facilities</u>
PLOQ.0049	<u>Simple Pipe Inspection</u>
PLOQ.0072	<u>Determine Damage Prevention Requirements for Pipeline Facilities</u>
PLOQ.0073	<u>Abnormal Operating Conditions</u>
Veriforce Task	Title
401OP	<u>Examination of Buried Pipelines When Exposed</u>
605OP	<u>Locate Line/Install Temporary Marking of Buried Pipeline</u>
608OP	<u>Damage Prevention for Blasting near a Pipeline</u>
607OP	<u>Damage Prevention: Observation of Excavating and Backfilling</u>
619OP	<u>Damage Prevention during Vacuum Excavation and Backfilling Activities</u>
703OP	<u>Placing/Maintaining Line Markers</u>

Other References or Related Specifications

- GPTC Guide for Gas Transmission and Distribution Piping Systems, Guide Material. Appendix G-192-16 Substructure Damage Prevention Guideline (Blasting Operations).
- ASCE 38-02 "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data"
- Common Ground, *Study of One Call Systems and Damage Prevention Best Practices* – August 1999.
- Common Ground Alliance – Best Practices (most recent edition)
- One Call Systems International Resource Guide (2009-2010)
- *Minimum Guidelines for Construction Near Natural Gas Pipeline Facilities*
- *Please be our Partner in Safe, Reliable Energy Delivery (Public Awareness)*
- *Important Safety Information for your Community (Public Awareness)*
- NACE RP-0502-2008 Standard Practice - Pipeline External Corrosion Direct Assessment Methodology

Regulatory Citations and Exceptions

Federal Requirements

Citation	Title
49 CFR 192.613	<i>Continuing Surveillance</i>
49 CFR 192.614	<i>Damage Prevention Program</i>
49 CFR 192.616	<i>Public Education</i>
49 CFR 192, Subpart N	<i>Qualification of Pipeline Personnel</i>

State Requirements

Company personnel shall comply with the appropriate state requirements of the One Call system. Attachment A provides a list of applicable state One Call contacts.

Definitions

Boring or Directional Drilling: A type of trenchless installation that may employ a variety of cutting, jetting, boring, reaming or jacking techniques to install an underground facility, but without the use of an open trench. The technique involves opening holes at either end of the installation and using different types of equipment to create a tunnel, shaft, or bore underground between the two points.

Damage: Any impact or exposure that results in the need to repair an underground facility due to a weakening or the partial or complete destruction of the facility, including, but not limited to, the protective coating, lateral support, cathodic protection, or housing for the line, device, or facility (CGA Best Practices, 9.0).

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Excavation Activities: Include excavation, blasting, boring, tunneling, mining, trenching, backfilling, the removal of above ground structures by either explosive or mechanical means, or any other earth moving operations.

Excavator: Includes any Company personnel, employees of Company contractors, or third-party individuals or personnel who perform excavation activities with mechanically powered equipment.

Locate: To indicate the existence of a line or facility by establishing a mark through the use of stakes, paint, whiskers, or some other customary manner that approximately determines the location of that line or facility (CGA Best Practices, 9.0)

Locate Request: A communication between an excavator and One Call center personnel in which a request for locating underground facilities is processed (CGA Best Practices, 9.0).

Near Miss: An event where damage did not occur, but a clear potential for damage was identified (CGA Best Practices, 9.0).

On-site Company Representative: Company employees, "Operations Personnel" as defined in the Responsibilities Section of this document, contractors or subcontractors who are knowledgeable of Company Policies, Plans, and Procedures and are qualified to observe, witness, supervise, or make decisions on behalf of the Company as it relates to the activity and as applicable to the responsibilities provided in the Company O&M Manual.

Permanent Road Crossing: Where a newly constructed road or railroad will cross over an existing pipeline. This includes any designated Federal, State, County, Parish, Township, City, Town, and residential or commercial road.

Pipeline: All parts of those physical facilities through which gas moves in transportation, including pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holder, fabricated assemblies, and components of a cathodic protection system.

Pipeline Facility: All parts of those physical facilities through which gas moves in transportation, including rights-of-way, pipes, valves, and other appurtenances attached to pipe, compressor units, metering stations, regulator stations, delivery and receipt stations, holders and fabricated assemblies, new and existing pipelines, rights-of-way, and any equipment, facility, or building used in the transportation of gas or in the treatment of gas during the course of transportation.

Right-of-Way (ROW): A pipeline ROW is a strip of land over and around pipelines where some of the property owner's legal rights have been granted to a pipeline company. A ROW agreement between the pipeline company and the property owner is also called an easement and is usually filed in the public records with property deeds. Rights-of-ways and easements provide a permanent, limited interest in the land that enables the pipeline company to operate, test, inspect, repair, maintain, replace, and protect one or more pipelines on property owned by others. The agreement may vary the rights and widths of

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the ROW, but generally, the pipeline company's rights-of-way extend 25 feet from each side of a pipeline unless special conditions exist.

Public Safety Answering Point (PSAP): 9-1-1 Call Centers, also known as Public Safety Answering Points (PSAPs), are the public's first line of contact to public safety authorities in an emergency. The call center is responsible for answering an emergency call for police, firefighting, and ambulance services.

Suspected and Unauthorized Activities: These activities may include but are not limited to, excavations both crossing or parallel to the pipeline facility, utility crossings, fence construction and crossings, landscaping activities, sign or other post installations, pond construction, drain tile installations, culvert or drain clearing, logging, road and temporary equipment crossings, blasting or seismic activities within 300 feet of the pipeline facility, all-terrain vehicle trails, dumping or filling activities, removal of cover, grading, or other activities prohibited by the Company's *Minimum Guidelines for Construction near Natural Gas Pipeline Facilities*.

Temporary Crossing: Where an individual, company or landowner will traverse over an existing pipeline for a short period of time with a vehicle or heavy equipment.

Underground Pipeline Facility: Any pipeline facility which is buried or placed below ground.

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Change Log

Date	Change Location	Changed By	Brief Description of Change
3/2/2015	Section 4.1 and 7.1	Juanita Scaggs	Change Public Awareness Plan to Program.
06/29/2015	OQ	Dave Anderson	Added Veriforce OQ tasks, editorial changes
9/1/2015	Throughout	Beth Reed	Revised entire document to put in new Template format. Revisions for clarity and consistency with related procedures throughout the document.
9/24/2015	Section 9.1 & References	Mark Newman	Edited references to plans or procedures.
10/5/2015	Section 2.3, Investigating Requirements	Mark Newman	Edits to provide consistency with reference to company employee or representative.
10/13/2015	Throughout	Mark Newman	Corrected spelling errors
12/8/2015	Documentation/ Attachment C	Mark Newman	Updated retention requirement for Form 1050-P17. Added retention boiler plate language. Added hyperlink for Map Correction Form. Updated Attachment C.
6/21/2016	Section 7.7	Randy Sturgill	Added information on Warning Tape.
7/20/16	Throughout	Beth Reed	2016 O&M Manual Review – Level 1. Removed hyperlinks in body of document in preparation for server migration, updated referenced document names/numbers as needed, minor editorial and grammatical corrections.

Review Log

Review Level (1 or 2)	Review Date
2	October 8, 2015
1	October 3, 2016

Attachment A – One Call Contact Information

DELAWARE Miss Utility of Delmarva Center: 1-800-282-8555 or (800) 441-8355 www.missutility.net Homeowner Web Ticket Entry Contractors Web Ticket Entry
INDIANA Indiana 811 (Indiana Underground Plant Protection Service, Inc.) Center: 1-800-382-5544 or (317) 842-8378 www.Indiana811.org Contractors Web Ticket Entry
KENTUCKY Kentucky 811 (Kentucky Underground Protection, Inc.) Center: 1-800-752-6007 or (502) 266-5677 www.kentucky811.org Contractors Web Ticket Entry
LOUISIANA Louisiana One Call System, Inc. Center: (800) 272-3020 www.laonecall.com Homeowner Web Ticket Entry Contractors Web Ticket Entry
MARYLAND Miss Utility of Delmarva Center: 1-800-282-8555 or (800) 441-8355 www.missutility.net Miss Utility Center: (800) 257-7777 www.missutility.net Homeowner Web Ticket Entry Contractors Web Ticket Entry
DISTRICT OF COLUMBIA District One Call Center: 1-800-257-7777 www.missutility.net
MISSISSIPPI Mississippi One Call System, Inc. Center: 1-(800) 227-6477 or (601) 362-4374 www.ms1call.org Contractors Web Ticket Entry
NEW JERSEY New Jersey One Call Center: 1-800-272-1000 (in state) or (732) 394-3000 www.nj1-call.org Contractors Web Ticket Entry

NEW YORK**Dig Safely New York**

Center: 1-800-962-7962

www.digsafelynewyork.com[Home Owner/Contractor Web Ticket Entry](#)**New York City – Long Island One Call center**

Center: 1-(800)272-4480

www.nycli1calldsi.com**NORTH CAROLINA****North Carolina One-Call Center, Inc.**

Center: 1-800-632-4949 or (336) 855-7799

www.ncocc.org[Contractors Web Ticket Entry](#)**OHIO****Ohio Utilities Protection Services (OUPS)**

Center: 1-800-362-2764

www.oups.org[Homeowner Web Ticket Entry](#)[Contractors Web Ticket Entry](#)**Oil and Gas Producers Underground Protection Service**

Center: 1-(800) 925-0988

www.ogpups.com**PENNSYLVANIA****Pennsylvania One Call System, Inc.**

Center: 1-800-242-1776 or (412) 464-7100

www.paonecall.org[Contractors Web Ticket Entry](#)**TENNESSEE****Tennessee 811 (Tennessee One Call System)**

Center: 1-(800) 351-1111 or (615) 367-1111

www.tnonecall.com[Contractors Web Ticket Entry](#)**VIRGINIA****Miss Utility of Virginia**

Center: 1-800-552-7001

www.missutilityofvirginia.com[Contractors Web Ticket Entry](#)**WEST VIRGINIA****West Virginia 811 or WV811 (Miss Utility of West Virginia, Inc.)**

Center: 811 or 1-800-245-4848

www.wv811.com**NATIONAL ONE CALL**

811 or 1-888-258-0808 (Connects caller to the appropriate State One Call organization.)

Damage Prevention Plan

Attachment B – Form 1050-P17 Sample (front only)

FORM-1050-P17		COLUMBIA PIPELINE GROUP (CPG) - LOCATION OF BURIED FACILITIES	
Rev. 7-2015		Line Number:	
One-Call/Locate Number:		Line Number:	
Line Size:	Line Pressure:	Approx. Station:	UTM Map No.:
Line located for:	Name: <input type="text"/> Address: <input type="text"/> Phone: <input type="text"/>	Type of Business (check one): <input type="radio"/> City <input type="radio"/> County/State <input type="radio"/> Utility <input type="radio"/> Contractor <input type="radio"/> Individual <input type="radio"/> Other <input type="radio"/>	
Transmission	Liquid	Gathering	Storage <input type="radio"/> Other <input type="radio"/>
R/W Name from Map:	Pipe Line Description (check one): <input type="radio"/> Steel <input type="radio"/> Plastic <input type="radio"/> Other <input type="radio"/>		
Current Owner:			
Reason for Locating Buried Facilities – Proposed Type of Construction (check ones that apply): <input type="radio"/> Water <input type="radio"/> Gas/Liquid <input type="radio"/> Electric <input type="radio"/> Sewer <input type="radio"/> Comm. Cable <input type="radio"/> Bldg. Demolition <input type="radio"/> Other (Explain below) <input type="radio"/> Design (Attach Design Plans – Submission Checklist)			
Brief Description of Proposed Construction – Describe Heavy Equipment to be on P/L ROW or Easement – Include Sketch Below or on Separate Sheet			
Road Crossing: Yes <input type="radio"/> No <input type="radio"/>		If yes, have plans been submitted for review? Yes <input type="radio"/> No <input type="radio"/>	
Blasting: Yes <input type="radio"/> No <input type="radio"/>		If yes, have plans been submitted for review? Yes <input type="radio"/> No <input type="radio"/>	
Describe Existing Line Marker Location:			
Line Located by: <input type="radio"/> Exposure <input type="radio"/> Pipeline Locator <input type="radio"/> Bar <input type="radio"/> Other (Explain below) <input type="radio"/> Approx. Length of Exposed Pipe: <input type="text"/> Approx. Depth of Line: <input type="text"/> GPS Coordinates: Latitude: <input type="text"/> Longitude: <input type="text"/>			
Description of Temporary Marking: <input type="radio"/> Flags <input type="radio"/> Paint <input type="radio"/> Other (Describe) <input type="text"/> Distance between Temporary Markers: <input type="text"/>			
Drawing Available Yes <input type="radio"/> No <input type="radio"/>	Copies of Drawings Given to Contractors Yes <input type="radio"/> No <input type="radio"/>	Line Marked by: (Name): <input type="text"/>	Date: <input type="text"/>
Note: Each Drawing Must be Marked or Stamped with Disclaimer Concerning Accuracy: <input type="text"/>			
Explanations (Name All Persons Witnessing Line Location) – Note All Additional Instructions Given to Excavator. If Installing Facilities above CPG's Existing Facilities, Further Review May be Warranted: <input type="text"/>			
<input type="checkbox"/> Check if photographs are available <input type="checkbox"/> Check here if the form was not signed <input type="checkbox"/> I hereby acknowledge that: (1) The approximate pipeline location has been satisfactorily marked and (2) I have received a copy of CPG's Minimum Guidelines for Construction Activities near Pipeline Facilities and agree to comply <input type="checkbox"/>			
Contractor and/or Landowner Signature: <input type="text"/> Date: <input type="text"/>		Company Representative Signature: <input type="text"/> Date: <input type="text"/>	
Company personnel will be responsible for making sure that the contractor has authority to sign this agreement. <input type="checkbox"/> Check here if the form was not signed			
In consideration of the permission given by CPG to construct upon its ROW, Contractor (<input type="text"/>) and/or Landowner (<input type="text"/>) agree to indemnify and hold harmless CPG and its parent, subsidiary and affiliate corporations, and the agents and employees of all of them, and each of them, from and against any and all losses (including, but not limited to, consequential damages) and liability for claims, demands, suits, or causes of action in law or in equity from damages and injury of every kind and nature, whether to persons or property, arising out of or in any manner related to (1) the performance of the construction activities hereunder and/or (2) subsequent damage by CPG or its agents to the facilities as described in this Location of Buried Facilities form. <input type="checkbox"/>			
Company Representative: <input type="text"/> (Print): <input type="text"/> Date: <input type="text"/>		Company Representative: <input type="text"/> (Signature): <input type="text"/> Date: <input type="text"/>	
Contractor and/or Landowner Representative: <input type="text"/> (Print): <input type="text"/> Date: <input type="text"/> Date: <input type="text"/>		Contractor and/or Landowner Representative: <input type="text"/> (Signature): <input type="text"/> Date: <input type="text"/>	
Section Break (Next Page) <input type="checkbox"/> Original Company <input type="checkbox"/> Copy Contractor <input type="checkbox"/>			

Damage Prevention Plan

Attachment C – Map Correction Form Sample

EXHIBIT 2

(DECLARATION OF ANDREW KVASNICKA)

PROCEDURE NUMBER:220.003.009

RELATED PLAN: 220.02.09

PROCESS OWNER: Pipeline

Right-of-Way Use Procedure

Scope:

This document provides for the design and construction of facilities on the rights-of-way owned and/or operated by Columbia Pipeline Group (CPG) companies, including Columbia Gas Transmission, Columbia Gulf Transmission, Crossroads Pipeline, Millennium Pipeline Company, Hardy Storage Company, and Columbia Midstream Group (hereinafter called "CPG").

This document is intended for landowners, utility owners, general contractors and their sub-contractors, pipeline/utility contractors, real estate developers, brokers and agents, and any other parties including their representatives whose proposed construction activities will impact CPG rights-of-way (hereinafter called "Permittee").

Applicable requirements in this document do apply to CPG construction or maintenance activities.

Purpose:

CPG's goal is to work proactively with the Permittee in the planning stages of proposed modifications, developments or construction activities. CPG's primary concern with construction activities near its pipeline and related facilities (pipeline facilities) is public safety and pipeline facility protection. The intent of this document is to provide a clear and consistent set of engineering requirements that shall:

- Reduce the risk of damage to CPG pipeline facilities.
- Ensure CPG's unencumbered access to its rights-of-way and related pipeline facilities.
- Provide for maximum use of workspace for CPG routine maintenance, future inspection, and/or repair work.
- Enable the effective corrosion protection of CPG pipeline facilities.

All construction activities and projects that are proposed on or near CPG pipeline rights-of-way are subject to formal review by CPG. Depending on the scope of the project and its impact on CPG rights-of-way and pipeline facilities, additional engineering requirements and protective measures may apply. Reimbursement or fees involved with the formal review may occur.

Keeping CPG facilities and pipelines safe is our first priority. CPG desires to be a good neighbor with residents along our pipeline rights-of-way, contractors, and excavators. To do so requires CPG to act responsibly to protect its right-of-way and prevent damage to the pipeline system. While CPG wants to accommodate the desired use of the property, its responsibility for public safety is paramount. Through proper planning and communications, CPG can help ensure the safety and integrity of CPG's pipeline system and the welfare of its neighbors.

NOTE

The transmittal of this document does not constitute CPG approval or permission for the Permittee to begin construction or work within or across the pipeline or facility right-of-way. Work may not begin until permission for such work has been given by CPG.

Specifications- Pipeline Facilities:

1. General Guidelines

Safety associated with the pipeline facilities shall be considered at all times. No attempt to probe for or engage in any construction activities, which might damage the pipeline, shall be permitted. Follow all applicable federal and state safety requirements at all times.

Before any preliminary field work or construction begins in the vicinity of CPG pipeline facilities the approximate location and/or elevation of the pipeline shall be made. Begin with a call to 811 or appropriate state "One Call" notification number (see Attachment A, "[One Call Contact Information](#)"). Request both the approximate location and depth of the pipeline to be determined in any area of proposed construction. The area of proposed construction shall be marked with white paint, flags, or as required by state law. Know what's below. Call before you dig.

Submit proposed drawings/plans to CPG Land Services Department (see Attachment B, "[CPG Design Plan Review Locations and Phone Numbers](#)") for review to determine the extent of CPG involvement. Drawings/plans shall be prepared in accordance with Attachment C, "[Requirements for Submission of Design Plans](#)," and should include a copy of Form 1050P17 – Location of Buried Facilities.

NOTE

Refer [Plan 220.02.06 Damage Prevention Plan](#), Section 3.11 Guidelines for Design and Construction within Right-of-Way for additional guidance information.

When conducting construction activities in or around CPG pipeline facilities or rights-of-way, a CPG on-site Company Representative shall be present unless otherwise permitted by CPG. A CPG Representative will review the location of pipeline facilities prior to starting work.

Permittee shall notify the responsible State “One Call” center to request that CPG re-mark a pipeline if the existing markers are inadequate or no longer visible for any reason, including disturbance due to construction activities.

NOTE

Willful damage or removal of a pipeline marker is a Federal offense with a maximum fine of \$100,000 (and up to \$250,000 if the action results in a death), imprisonment of up to one year, or both for each offense.

Permittee shall not burn or bury trash, brush, or other items or substances within CPG pipeline rights-of-way.

Permittee shall not park equipment or store materials on the CPG right-of-way.

Use of vibratory equipment larger than walk-behind units shall not be permitted within 25 feet of the pipeline or related facility, unless otherwise permitted by CPG.

2. Excavation and Construction Restrictions

2.1. Mark and Locate

The Permittee shall mark any excavation area with white paint, flags, or as required by state law that the Permittee has proposed within CPG rights-of-way.

Before excavation can begin near a CPG right-of-way, the excavation area must be located and marked in according to the appropriate state one call regulation. Safe digging is no accident. Know what's below. Call 811 before you dig. CPG or its representative shall locate the pipeline and determine the approximate depth of cover before the Permittee can begin excavation.

The Permittee shall not perform any excavation, crossing, backfilling, or construction operations until a Company representative has reviewed the proposed work and given permission for work to proceed.

CPG shall place temporary pipeline markers consisting of "yellow" whiskers, markers/flags, or paint, or as required by state law. Yellow paint, markers/flags, or whiskers identify the approximate location of the pipeline and right-of-way within the proposed work area, and shall provide information on how to respond should the pipeline be damaged or a natural gas release occur. All personnel operating equipment over or around the pipeline shall be made aware of its location and what actions shall be taken if contact is made with the pipeline.

NOTE

If pipeline damage occurs (which could include pipeline breaks, significant leaks, nicks, dents, gouges, grooves or damage to above ground appurtenances, lines, conduits, coatings, or cathodic protection) immediately report the information to CPG:

- Columbia Gas Transmission, Crossroads Pipeline, Millennium Pipeline Company, Hardy Storage Company, - 1-800-835-7191
- Columbia Gulf Transmission 1-866-485-3427
- Columbia Midstream Group 1-855-511-4942

Damage that constitutes an emergency condition shall be reported to the local 911 Call Center or Public Safety Answering Point (PSAP).

2.2. Excavation and Monitoring

CPG shall have a Company representative present during all excavation activities. The Company representative shall have full authority to stop the work if it is determined that the work is being performed in an unsafe manner relative to CPG facilities or personnel.

No equipment shall work directly over the pipeline, unless CPG grants specific written permission. The Permittee shall install temporary fencing along the CPG right-of-way boundaries so equipment shall not inadvertently pass over the pipeline at locations other than those established for the crossing.

When excavating within a CPG right-of-way, in the presence of a loaded pipeline, the Permittee's excavation equipment shall have a plate welded or attached over the teeth of the excavator bucket. Remove side cutters from equipment before excavation.

CPG requires potholing techniques to be used when digging within 24" (2 feet) of the outer edge of the pipe, unless requirements that are more stringent are set forth by the applicable state's One Call system. Within this "tolerance zone" only hand excavation, air cutting, vacuum excavation or other CPG approved techniques are permitted.

No excavation shall be made on land adjacent to the pipeline that shall in any way impair, withdraw lateral support, cause subsidence, create the accumulation of water, or cause damage to the pipeline or right-of-way.

The Permittee shall ensure all excavation work complies with OSHA's excavation standards outlined in 29 CFR 1926 and correct any noncompliant excavation site before work within CPG right-of-way continues.

If conditions require, the Permittee shall be directed by CPG to install additional earthen fill or other suitable materials to maintain proper vertical clearance from the pipeline.

At any location where the pipeline is exposed, the Permittee shall provide CPG the opportunity to inspect the pipeline condition, install cathodic protection equipment, repair any pipe coating imperfections, and/or install underground warning materials.

The maximum unsupported exposed length of pipe shall be determined by CPG. When required, support the pipeline with sand bags, padded skids or other suitable material as permitted by CPG. At no time shall the pipeline be used as a brace to support equipment or sheeting/shoring materials.

2.3. Backfilling

No CPG buried pipeline shall be left exposed for any duration of time, unless otherwise permitted by CPG.

Backfill and compaction shall be performed to the satisfaction and in the presence of a Company representative. At least 6 inches of fine, loose earth or other permitted backfill material with no sharp gravel, rock, hard clods, vegetation, or other debris shall be added on all sides of any pipeline, and remaining backfill shall be placed so as not to disturb this padding material or damage the pipeline and its coating. Backfill over the pipe shall be compacted by hand until 18 inches of cover is achieved.

A flowable fill, mixed to CPG specifications, may be required by CPG to achieve necessary compaction and support under and around the pipe. Disturbed ground shall be compacted to at least the same degree of compaction as surrounding areas. The Permittee shall restore the site to its original condition unless otherwise permitted by CPG.

2.4. Cover, Grading, and Drainage

Variance of the existing depth of cover is not permitted without CPG's written permission. All proposed road crossings of buried facilities must be evaluated by

CPG. Protective measures may be required before construction activity can begin or during the course of such construction activity.

Where additional cover is permitted, the final grading shall meet a minimum cover of 36 inches over the pipeline but shall not exceed five (5) feet from the top of the pipeline without CPG written permission.

Detention or Retention ponds, lakes, structures or any type of impoundment of water, temporary or permanent, shall not be permitted within the right-of-way.

Any modifications to an existing drainage pattern shall be designed so there is no erosion of the cover over CPG right-of-way.

For drainage channels and ditches where a minimum cover of 36 inches cannot be maintained, the Permittee shall be responsible for the cost of installation of additional protection required by CPG.

3. Aboveground/Underground Structures, Gardening and Landscaping

3.1. General Requirements

Buildings or other structures, including but not limited to overhanging balconies, patios, decks, swimming pools, wells, walls, utility poles, septic systems, propane tanks, transformer pads, or the storage of materials which creates an obstruction or prevents the inspection of the right-of-way by air or foot, shall not be permitted within the CPG right-of-way.

The Permittee shall not build retaining walls, drive piling or sheeting, or install an engineered structure that may negatively impact the CPG right-of-way.

3.2. Gardening and Landscaping

The right-of-way area may be planted in lawn, flowerbeds, or vegetable gardens, or used for normal agricultural purposes.

Shrubs maturing at less than five feet tall shall be permitted in the right-of-way. Permitted shrubs shall be planted so that branches are a minimum of five feet away from the pipeline at maturity.

Shrubs maturing at more than five feet tall and all trees (including fruit/nut bearing and Christmas tree farms) shall not be permitted within the right-of-way.

CPG shall not be responsible for replacement of or reimbursement for any plantings within the right-of-way, unless otherwise stated in applicable land rights document.

3.3. Fences and Walls

Fences or continuous hedges that block visual inspection, interfere with access to CPG facilities, or are installed longitudinally to the pipeline shall not be permitted within the right-of-way.

Fence or hedge height may not exceed 5 feet in height. Commercial or residential chain link fence installations are permitted. Fence post shall not be placed within 3 feet of the outermost edge of the pipeline.

Electric fences equipped with insulated handled gate or some type of disconnect, that is available to CPG shall be permitted across CPG rights-of-way. Conductors for electric fences shall not be placed within 15 feet of any CPG above-grade piping with mechanical fittings.

Fences, including invisible dog fences, shall cross as near to 90 degrees as possible. Crossings at less than 45 degrees shall not be permitted.

Fences permitted to cross a CPG pipeline right-of-way must be designed and installed to allow at least a sixteen foot gate or opening centered on the pipeline and must cross at or near to 90 degrees as possible, or as permitted by CPG.

Permittee shall provide CPG access through all gates permitted within the CPG right-of-way. If Permittee installs locks on said gates, CPG shall also be allowed to install its own locks in a manner that allows CPG unimpeded access without limiting Permittee's access.

Masonry, brick, or stonewalls shall not be permitted on the right-of-way.

Permittee will allow CPG to place pipeline markers at or near, fences, walls or shrubs in order to identify the pipeline route.

4. Field Tile

Unless provided for by the right-of-way agreement, new terra cotta field tile shall not be placed within the CPG right-of-way.

Permittee shall execute the Field Tile Agreement (Attachment D) prior to any field tile installations that occur from the edge of CPG right of way to the edge of CPG right of way. Permitted field tile or drainage pipe shall cross the pipeline right-of-way at or as near to 90 degrees as possible with a minimum clearance of 12 inches above or below the pipeline. Crossings less than 45 degrees are not permitted. Field tile shall not drain onto a CPG right-of-way. Longitudinal runs of field tile shall not be closer than 15 feet from CPG pipelines

5. Roads, Driveways, Sidewalks, Parking Areas and Walking/Bicycling Paths

5.1. General Requirements

Roads, driveways, sidewalks, or parking areas shall not be constructed within CPG right-of-way without CPG's prior review and written permission. All plans for pavement within the right-of-way shall be submitted to the CPG Asset Management Department. CPG, as needed, will perform external load evaluations to determine if additional protective measures are required. Protective measures may be required before construction activity can begin or during the course of such construction activity.

Permitted roads, driveways, or sidewalks shall cross the right-of-way at as near to 90 degrees as possible. Crossings at less than 45 degrees are prohibited.

Roads, driveways and concrete sidewalks shall not be permitted to be installed longitudinally within the right-of-way.

Asphalt pavement shall not be permitted closer than five (5) feet from the pipeline except in the case of roadway, driveway, or parking lot "crossovers." Where parking areas are permitted within CPG rights-of-way, barriers shall be installed on the edge of the parking area closest to the pipeline.

Venting systems shall not be used as a means to extend crossovers or vent parking lots.

The use of alternative paving material designs (other than asphalt or concrete) shall be reviewed by CPG on a case-by-case basis. CPG will notify Permittee if design is permitted.

Cull de sacs shall not be permitted within the right-of-way area.

5.2. Concrete Roads, Driveways and Sidewalks

NOTE

All applicable general requirements listed in Roads, Driveways, Sidewalks, Parking Areas and Walking/Bicycling Paths applies to the additional requirements in this section.

Continuously poured, steel reinforced concrete shall not be permitted within CPG right-of-way.

Concrete sidewalks and/or curbs, which cross the pipeline, shall have expansion joints installed five (5) feet on either side of the pipeline.

Residential or commercial driveways may be permitted if the design and installation meet the requirements of Attachment E, "[Residential/Commercial Concrete Driveway within CPG Right-of-Way](#)".

Portable concrete slabs may be permitted for permanent or extended temporary crossings if the design and installation meet the requirements of "Attachment G - [Temporary or Permanent Crossings](#)".

5.3. Asphalt Roads and All Parking Areas

Parking areas require written permission from CPG.

NOTE

All applicable general requirements listed in Roads, Driveways, Sidewalks, Parking Areas and Walking/Bicycling Paths applies to the additional requirements in this section.

Asphalt roads shall not be greater than 25 feet in width.

Permitted parking areas, including but not limited to asphalt and gravel parking areas shall not be installed within five (5) feet of CPG pipeline facilities.

Parking lot "crossovers" may be permitted by CPG and shall be no greater than 25 feet in width. Parking lot "crossovers" shall be spaced at a minimum of 50-foot intervals (measured from the edge of the crossover).

5.4. Walking/Bicycling Paths

NOTE

All applicable general requirements listed in Roads, Driveways, Sidewalks, Parking Areas and Walking/Bicycling Paths applies to the additional requirements in this section.

Walking/bicycling paths shall be constructed at the outside edge of the CPG permanent right-of-way area. Path width within CPG rights-of-way shall be designed not to exceed six (6) feet.

CPG reserves the right to prohibit the construction of walking/bicycling paths inside its right-of-way area if, at CPG's sole determination, the proposed path may adversely impact operation and/or maintenance of the pipeline.

Paths shall cross the CPG pipeline as close to 90 degrees as possible, but in no case less than 45 degrees. CPG shall make the sole determination of number of path crossings permitted.

No motorized vehicles of any type, other than power driven wheelchairs, shall be permitted to utilize paths, which run longitudinally inside the right-of-way.

Paving shall be restricted to asphalt only. No concrete paving shall be permitted.

Landowner shall be responsible for maintaining the path to prevent right-of-way damage (including erosion, illegal dumping, etc.) Any change in grade or modifications to existing grade required to control erosion shall be approved by CPG.

6. Utility Crossings

6.1. General Requirements

Utilities shall include natural gas, water, electrical, sewer, television cable, telephone, fiber optic communications and all other metallic or non-metallic line crossings. Production, gathering or other pipelines transporting natural gas, oil, steam, petroleum, or other industrial gaseous materials shall comply with these requirements.

NOTE

The term foreign utility crossing is used interchangeable with utilities or utility crossing as used in this section.

All utility crossings must be approved by CPG before installation begins and must meet the criteria described in this section or covered by other sections in this document.

Every effort shall be made to have the utility cross the CPG right-of-way as near 90 degrees as possible. In no case shall the utility be permitted to cross the CPG right-of-way at an angle less than 45 degrees. Utilities shall not be installed longitudinally within the right-of-way.

Utilities shall cross beneath the pipeline with a minimum vertical clearance of 24 inches where CPG pipelines have at least 3 feet of cover to top of pipe. For circumstances where less than 3 feet of cover exists, CPG may require additional clearance. Under certain circumstances, CPG may permit a crossing above the pipeline while maintaining a vertical clearance of at least 24 inches. These circumstances include excessively deep pipelines (5 ft. or more,) the presence of consolidated rock, or for service entrances to single-family dwellings.

Earthen fill, or other CPG permitted isolation material shall be placed between the pipeline and the utility.

All water valves, curb boxes, manholes, sprinkler heads, splice boxes, service risers, energized equipment, poles, towers, guy wires, mechanical supports, ground rods, anchors and similar structures shall be placed outside the CPG right-of-way. Sprinkler systems shall be limited to a single line crossing unless otherwise permitted by CPG.

Except for trenchless excavation installation, warning tape, in accordance with A.P.W.A. Uniform Color Code, shall be placed above the utility, 12 inches below ground, across the CPG right-of-way.

All permitted underground utility crossings shall be marked with proper signage at the edge of the CPG right-of-way boundaries.

Permitted utility crossings shall be marked according to the A.P.W.A. Uniform Color Code, as listed below.

RED – Electric Power Lines, Cables, Conduit, and lighting Cables	YELLOW – Gas, Oil, Steam, Petroleum, or Gaseous Material
ORANGE – Communication, Alarm or Signal Lines, Cables, or Conduit	BLUE – Potable Water
GREEN – Sewers and Drain Lines	WHITE – Proposed Excavation Limits or Route
PINK – Temporary Survey Markings, Unknown / Unidentified Facilities	PURPLE – Reclaimed Water, Irrigation, and Slurry Lines

6.2. Trenchless Excavation

NOTE

Boring or directional drilling (see Definitions) and forms of horizontal borings (e.g. horizontal directional drilling or HDD are trenchless excavation methods.

Permittee is responsible for obtaining proper One Call notifications in the area of the entrance pit, along the proposed excavation path, and at the exit pit.

A minimum clearance of 24" above the top and below the bottom of CPG pipelines shall be required. CPG pipelines must have at least 3 feet of cover to top of pipe. For circumstances where less than 3 feet of cover exists, CPG may require additional

clearance. This clearance refers to the pipe being installed, not the location of the pilot drill.

Utility crossings proposed for installation using a trenchless excavation method (directional drilling, jacking, slick boring, etc.) shall use a tracking system to verify the exact location of the drill head. Blind boring shall not be permitted on the CPG right-of-way. The proper line and grade shall be established in order to maintain the required minimum clearance. Permittee shall also submit the bore profile drawing to CPG for review prior to starting operations.

Permittee will locate trenchless crossings of CPG right-of-way outside of rivers, streams, lakes, wetlands and other water bodies.

For normal directional drilling or trenchless operations, a four (4) feet by four (4) feet excavation window(s), 24 inches below the bottom of CPG pipeline shall be required for visual inspection to ensure the drill (or bore) does not impact the pipeline. For cases where an excavation window is not practical, such as HDD more than 5 ft. below CPG pipeline, the Permittee shall adhere to any additional CPG requirements, including but not limited to additional vertical clearance. Additional care may be needed during reaming.

Follow state and/or local requirements for trenchless excavation practices at all times. The Permittee shall also adhere to any additional requirements, as determined by CPG. Additional requirements may include, but are not limited to, providing documentation of trenchless operator qualification and/or documentation of operator training for the specific trenchless equipment used.

The trenchless equipment operator shall perform a site inspection that includes walking the entire trenchless excavation path, and verifying minimum clearances that are required prior to commencing any work.

Trenchless activities shall be stopped if at any time an abnormal condition, unknown substructure or other hidden hazard is encountered. Operations may proceed safely only if positive identification has been made.

6.3. **Cable/Wire Utility Crossings**

NOTE

All applicable general requirements listed in Utilities, Section 5.1 applies to the additional requirements in this section.

All permitted cable/wire utilities crossing below CPG pipelines including, but not limited to, fiber optic, electric, telephone and television (excluding single telephone and single television drops), shall be encased with a minimum of two (2)-inch Schedule 40 PVC pipe, or equivalent, for the complete width of the right-of-way, regardless of the installation method used.

For safety reasons, electric and fiber optic lines crossing below CPG pipelines shall also be surrounded with a minimum of six (6) inches of colored concrete in accordance with the A.P.W.A. Uniform Color Code or 4-inch minimum diameter, standard inch wall thickness, coated steel pipe across the full width of the CPG right-of-way, except in cases of trenchless installation or where the top of the conduit used for the crossing is at least three feet below CPG's pipeline and CPG's pipeline has at least three (3) feet of cover to top of pipe.

In cases where the utility will be installed in excess of 5 ft. below the bottom of CPG pipeline the additional requirement for colored concrete and 4-inch minimum coated steel pipe will be waived in lieu of applicable local, state and federal code requirements for said utilities.

All underground cable/wire utilities permitted by CPG to cross above the pipeline (excluding single telephone and single television drops), shall be encased in two(2)-inch minimum diameter Schedule 40 PVC pipe and a four (4)-inch minimum diameter, standard inch wall thickness, coated steel pipe or Schedule 40 PVC pipe across the full width of the CPG right-of-way. No concrete shall be used for crossings above the pipeline.

Aboveground cables shall be installed with a minimum of 33 feet above-grade clearance for the full width of the CPG right-of-way to allow CPG contractors to work on our pipelines unimpeded by overhead utility lines, unless otherwise permitted by CPG. This does apply to residential service lines. Residential service lines may be buried in accordance with the requirements in Section 6.3.

Unacceptable levels of AC or DC stray current caused by the installation of a foreign utility crossing will be mitigated at the expense of the Permittee.

6.4. Spare Conduit Installation

Only conduits that can be identified for future use may be installed. Conduits must be at least three (3) feet below CPG's pipelines.

Conduits must be installed to meet all of the requirements for that specific type of crossing (including tracer wire, warning tape, etc.). Both ends of the conduits must be painted in accordance with the A.P.W.A. Uniform Color Code except for electric and fiber optic lines which shall also be surrounded with a minimum of six (6) inches of colored concrete painted in accordance with the A.P.W.A. Uniform Color or four (4)-inch minimum diameter, standard inch wall thickness, coated steel pipe across the full width of the CPG right-of-way, except in cases of trenchless installation or where the top of the conduit used for the crossing is at least three feet below CPG's pipeline.

Consult with local engineering support for additional marking requirements for spare conduit installation.

6.5. Metallic Utility Crossings

NOTE

All applicable general requirements listed in Utilities, Section 5.1 applies to the additional requirements in this section.

Corrosion protection (CP) materials including but not limited to bonds, test leads, test stations, magnesium anode current drains, and permanent reference electrodes shall be installed at the expense of the Permittee where necessary, at CPG's sole determination.

Minimum CP material requirements shall be:

- Installation of test leads on both the CPG pipeline and the Permittee's crossing structure.
- Installation of a permanent Copper-Copper Sulfate (CuCuSO₄) reference electrode between the CPG pipeline and the Permittee's crossing structure.

Permittee shall be responsible for the corrosion protection of its facilities against CPG's cathodic protection system. Permittee shall be responsible for installation of facilities on its structures. CPG shall provide personnel, at the expense of Permittee, for installation of facilities on CPG's pipelines.

Utilities shall be coated with a non-conductive coating for the entire width of the CPG right-of-way.

NOTE

It is strongly recommended for all metallic utility crossings that Permittee's Corrosion Engineers or their designee contact and communicate with CPG Corrosion Engineers concerning any existing or proposed CP system design details so as to facilitate the best design for any additional CP equipment as may be necessary to protect the assets and interests of both the Permittee and CPG.

6.6. Non-Metallic Utilities

NOTE

All applicable general requirements listed in Utilities, Section 6.1 applies to the additional requirements in this section.

Utilities shall be installed with tracer wire for the full width of the CPG ROW unless otherwise permitted by CPG. At locations where tracer wire is installed, tracer wire shall be raised to the ground surface and connected to a test station for monitoring.

Natural gas (or other industrial gases) line permitted by CPG to cross below the pipeline shall either be encased in a six (6)-inch envelope of yellow 2,000 psi concrete or encased in four (4)-inch minimum diameter, standard wall thickness, coated steel pipe across the full width of the CPG right-of-way.

Natural gas (or other industrial gases) line permitted by CPG to cross above the pipeline shall be encased in 4-inch minimum diameter, standard wall thickness, coated steel pipe across the full width of the CPG right-of-way. Do not use concrete for crossings above the pipeline.

7. Temporary Access Roads and Heavy Construction Vehicle Crossings.

7.1. General Requirements

Field personnel may authorize a temporary heavy construction vehicle crossing without engineering review for bridge crossings ONLY. The support materials for the bridge must be installed at least 3 feet away from the pipeline on each side, and a visible air space must be maintained between the bridge material and the ground directly above the pipeline at all times. CPG field personnel must be on-site to witness construction/placement of the temporary bridge. See examples of air bridges in "Attachment G".

For all other proposed temporary crossings, external load evaluations shall be performed by CPG Pipeline Engineer to determine if additional protective measures are required (see Attachment F, [Equipment Crossing Data Sheet](#)). Earthen ramps, swamp mats, reinforced concrete slabs, steel plates, bridges or other protective materials may be required prior to crossing or during the course of such crossing activity.

During the use of a permitted temporary construction road, the Permittee shall take all reasonable and necessary steps to maintain the integrity of the permitted crossing protection. CPG personnel should inspect crossing periodically and may require the Permittee to provide additional protective measures deemed necessary to prevent damage to the pipeline or right-of-way.

CPG shall limit the number of temporary construction roads constructed by the Permittee. Crossings shall be limited to pre-selected sites and shall be clearly defined and marked. Random crossings are not permitted.

8. Construction Induced Vibrations

Construction activities that generate ground vibrations, including but not limited to, pile driving, sheet driving, soil compaction work, jack hammering or ramming, shall be reviewed and permitted by CPG on a case-by-case basis. Ground vibration shall be limited to that permitted by the appropriate State's blasting law where CPG pipeline facilities exist or 1.25 in/sec velocity, whichever is less.

9. Blasting Operations

Any blasting proposed within 300 feet of CPG's facilities must be submitted to CPG in advance, along with a blasting plan outlining such proposed activity. No blasting may begin unless and until CPG's provides prior review and written confirmation that it does not object to such blasting.

Blasting plans shall be submitted ten (10) working days (excludes Saturday, Sunday or federal holiday) prior to the blasting event. It is the responsibility of the Permittee to complete the CPG blasting form (See Attachment H, "[Blasting Data Sheet](#)"). It is imperative that a drawing of the blast area be included with the submission of all blasting plans.

Review of the blast data shall not be performed until a drawing is submitted showing the location and orientation of all charges relative to the CPG pipeline. Any modifications to the blasting plan must also be submitted to CPG for prior review and should not be implemented unless and until CPG provides prior written confirmation that it does not object to such modifications. All drawings shall be scalable and show the distance from the charges to the CPG pipeline.

Permittee shall conduct a three (3) axis seismic survey for each blast event within 300 feet of a CPG pipeline, unless otherwise permitted by CPG. Seismic equipment shall be placed over the pipeline in the proximity of the closest charge hole to the pipeline, aligning one of the axes parallel to the pipeline and another axis perpendicular to the pipeline.

NOTE

Blasting conducted without seismic equipment and using the Scaled Distance Formula shall be evaluated on a case-by-case basis.

Ground vibration shall be limited to that permitted by the appropriate State's blasting law where CPG pipeline facilities exist or 1.25 in/sec velocity, whichever is less. The value shall be expressed as the Peak Particle Velocity (PPV) in units of inches per second. Pipeline facilities are recognized by federal blasting laws as a structure and must be protected from excessive ground vibrations.

Specifications – Storage Wells:

1. General Guidelines

Any third party activity or development that impedes CPG's ability to safely, efficiently and legally drill, operate and maintain storage wells, shall not be permitted.

CPG's storage well setback specifications are within the confines of applicable leases and laws and allow CPG access to potential and existing storage well operations while ensuring employee and public safety.

CPG requires notification of any proposed aboveground or belowground construction activities or placement of objects closer than 300 feet in any direction of a wellhead. Notification shall be to the CPG Asset Management Department and the Permittee shall submit with this notification a full description of the proposed construction or placement of the object, complete with dimensions, location and distance from the wellhead.

CPG reserves the right to object to such construction activities or placement of objects closer than 300 feet from any wellhead when certain topographical and/or safety conditions exist. These topographical features and permanent structures include, but are not limited to, wellheads situated near significant changes in elevation, rivers, ponds, streams, existing roads, railroad rights-of-way, power line rights-of-way, and high-pressure wells.

Additional distances over 300 feet may be necessary for certain CPG activities, including but not limited to, the presence of hydrogen sulfide, flaring of wells, horizontal or directional

drilling, drilling of multiple wells from a single location, salt cavern development, aquifer storage development, high pressure and high deliverability wells.

Except as otherwise provided in the applicable lease, there shall be no aboveground or belowground construction activities or placement of objects within 200 feet in any direction from a wellhead by the Permittee.

Construction induced vibration and blasting requirements as specified in "Specifications-Pipeline Facilities" applies to activity near a CPG storage well.

Letters of Conditional Acceptance and Waivers:

Construction activities that follow CPG Minimum Construction Guidelines provided on the back of Form 1050P17 – Location of Buried Facilities can be approved by local Frontline Lead or Team Leader.

Construction activities that require additional requirements as specified by this document, over the minimum requirements listed in CPG Minimum Construction Guidelines require a "Letter of Conditional Acceptance". Letters are provided by local engineering or Land Agent and approved by the local Operations Manager or designee.

Any deviation from the requirements in this document requires an approved waiver ([Waiver Request Form](#)) prior to construction. Waiver Request Form and supporting documentation must be submitted to the local Land Agent. Waivers require prior approval by Operations Manager, Land Manager, and Engineering Manager. Additional approval by Vice President, Safety, Training, and Natural Resource Management is also required. Approval to begin construction is not granted until CPG notifies Permittee that a waiver has been approved.

Disclaimers:

In the event that the provisions of an applicable land rights document conflict with the requirements set forth above, the land rights document shall supersede these requirements.

CPG may permit certain property improvements in its rights-of-way. However, in the course of operating and maintaining its pipeline system, CPG may sometimes remove these improvements from its right-of-way in order to facilitate operation and maintenance work. CPG shall not assume responsibility, financial or otherwise, for any improvements directly or indirectly damaged as a result of routine or emergency maintenance or repairs on the pipeline facilities.

These Right-of-Way Use Specifications were compiled to address the majority of issues concerning the design and construction of facilities on CPG rights-of-way. CPG at its sole

discretion may elect to modify specific requirements for a project. Modifications shall be made by appropriate CPG personnel and shall be properly documented.

Documentation Requirements:

- Attachment A: - [One Call Contact Information](#)
- Attachment B: - [CPG Design Plan Review Locations and Phone Numbers](#)
- Attachment C: - [Requirements for Submission of Design Plans](#)
- Attachment D: - [Field Tile Agreement](#)
- Attachment E: - [Residential Concrete Driveway within CPG ROW](#)
- Attachment F: - [Equipment Crossing Data Sheet](#)
- Attachment G: - [Temporary or Permanent Crossings](#)
- Attachment H: - [Blasting Data Sheet](#)
- Attachment I: - [Waiver Request Form](#)

Reference Documents:

Related Plans

Document Number	Document Title
Plan 220.02.06	<u>Damage Prevention</u>

Other Reference Documents

[Common Ground Alliance Best Practices](#)
[Pipelines and Informed Planning Alliance](#)

Definitions:

Boring or Directional Drilling: A type of trenchless installation that may employ a variety of cutting, jetting, boring, reaming or jacking techniques to install an underground facility but without the use of an open trench. The technique involves opening holes at either end of the installation, and using different types of equipment, creating a tunnel, shaft or bore underground between the two points.

Company Representative: Company employees, "Operations Personnel" (see definition), third party, or subcontractors who are knowledgeable of Company plans and procedures and are qualified to observe, witness, supervise or make decisions on behalf of the Company as it relates to the activity and as applicable to the responsibilities provided in the Company O&M Manual.

Excavation Activities: Include excavation, blasting, boring, tunneling, mining, trenching, backfilling, the removal of above ground structures by either explosive or mechanical means, or any other earth moving operations.

Excavator: Includes any Company personnel, employees of Company contractors, or third-party individuals or personnel who perform excavation activities with mechanically powered equipment.

Operations Personnel: Internal employees who possess the proper operator qualifications, approved by the local Operations Team Leaders and/or Operations Managers to perform locates. The use of temporary/contract employees who are properly qualified, and with the proper operator qualifications, will be considered on a case-by-case basis with approval of the specific operating areas Regional Director.

Pipeline: All parts of those physical facilities through which gas moves, including pipe, valves and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holder, fabricated assemblies and components of a cathodic protection system.

Pipeline Facility: All parts of those physical facilities through which gas moves or is stored, including but not limited to the associated rights-of-way or set-back area, pipes, valves and other appurtenances attached to pipe, compressor units, metering stations, regulator stations, delivery and receipt stations, holders and fabricated assemblies, pipelines, storage wells and including associated non-gas equipment, facilities or building used as part of the pipeline system.

Right-of-Way: A pipeline right-of-way is a strip of land over and around pipelines where some of the property owner's legal rights have been granted to a pipeline company. A right-of-way agreement between the pipeline company and the property owner is also called an easement and is usually filed in the public records with property deeds. Rights-of-ways and easements provide a permanent, limited interest in the land that enables the pipeline company to operate, test, inspect, repair, maintain, replace, and protect one or more pipelines on property owned by others. The agreement may vary the rights and widths of the right-of-way, but generally, the pipeline company's rights-of-way extend 25 feet from each side of a pipeline unless special conditions exist.

Setback: The distance in all directions from any storage well that must remain free from any construction activities or placement of any objects with the exceptions of facility related construction and appurtenances.

Storage Well: Any active, special or storage observation well and associated appurtenances located within the protective boundaries of a federally certificated storage field.

Temporary Crossing: Where an individual, company or landowner will traverse over an existing pipeline for a short period with a vehicle or heavy equipment.

Underground Pipeline Facility: Any pipeline facility, which is buried or placed below ground.

Change Log:

Date	Change Location	Changed By	Brief Description of Change
9/15/2014	Throughout	M. Newman	Editorial and format changes. Replaced CPG representative with Company representative.
9/15/2014	Section 8	M. Newman	Added definitions for "Company representative" from Plan 220.02.06 and "Operation Personnel".
10/1/2014	Section 5.3 Section 3.6.2- I – trenchless excavation, Section 3.6.2	S. Parrish, M. Kubincanek	Section 5.3-comment, section 3.6.1-I and 3.6.2 – various comments and edits.
12/2/2014	Attachment E	M. Newman	Added GPS coordinates.
9/15/2014	Throughout	M. Newman	Editorial and format changes. Replaced CPG representative with Company representative.
9/15/2014	Section 8	M. Newman	Added definitions for "Company representative" from Plan 220.02.06 and "Operation Personnel".
2/3/2015	Throughout	M. Newman	Format to new procedure template. To see previous version go to SharePoint Version History. Added edits to Attachment B.
2/3/2015	Purpose	M. Newman	Edits made to content
2/3/2015	Specifications – Pipeline Facilities – Section 1 General Requirements	M. Newman	Edits made to content
2/3/2015	Specifications – Pipeline Facilities – Section 2.1 Mark and Locate	M. Newman	Edits made to content

Date	Change Location	Changed By	Brief Description of Change
2/3/2015	Specifications – Pipeline Facilities – Section 5.3 Cable/Wire Utility Crossings	M. Newman	Edits made concerning requests for lower than 33' clearances.
2/3/2015	Specifications – Pipeline Facilities – Section 5.3 to 5.5	M. Newman	Edits made to reflect references to information removed by document format revisions.
2/3/2015	Waiver	M. Newman	Created Section for Waiver Process
2/4/2015	Attachments	M. Newman	Edit attachments E
4/30/2015	Section 4	S. Parrish	Revised Section 4 – Field Tile, as agreed upon after consultation with Ohio Land agents, TL's and Mgr. Added Attachment D – Field Tile Agreement. Added language to construction induced vibrations and blasting operations sections.
5/6/2015	Throughout	M. Newman	Edit and format. Prepare document for Technical Writer to send for Manager and Legal Review/Approval. Set up attachments as separate documents for S&P Library.
5/12/15	Section 2.4 and 3.3	M. Newman	Edited and updated cover and fence requirements.
5/15/2015	Attachment B	M. Newman	Updated information as provided from Land Services.
5/18/2015	Throughout	J. Scaggs	Preparing document for legal review. Made minor wording changes for clarification.
6/1/2015		J. Scaggs	Legal review completed, routing to John Bentley and Butch McCoy for approval.

Date	Change Location	Changed By	Brief Description of Change
6/2/2015	Section 4	M. Newman	Edits to field tile installation, remove perforated pipe reference. Type of pipe will be determined on a case by case basis and agreed to under the Field Tile Agreement.
6/05/2015	Attachment B	Dave Anderson	Added CMG contact information
6/8/2015	Attachment H Section 2.3	Stan Parrish	Add a line in the Blaster's section of Attachment F - Blasting Data Sheet for the Blaster to record Peak Particle Velocity (PPV) in inches per second at the nearest pipeline(s). Section 2.3 added fill may be required under and around the pipe.
6/8/2015	Throughout	Mark Newman	Review and merge edits to most recent version, ready for Publishing.
7/7/2015	Section 3.3	Mark Newman	Revised language to clarify installation of fences and gates along the ROW.
7/8/2015	Section 6.1	Mark Newman	Added "Production, gathering or other pipelines transporting natural gas, oil, steam, petroleum, or other industrial gaseous materials shall comply with these requirements."
7/8/2015	Letters of Conditional Acceptance and Waivers	Mark Newman	Update required due to addition of Attachment I.
7/8/2015	Attachment I	Mark Newman	New "Waiver Request Form".
7/8/2015	Section 9	Mark Newman	Added review and approval requirements for blasting and modifications to blasting plan.
7/29/2015	Sections 2.4, 3.2, 3.3, 5.1, 5.3, 6.1, 7.1, and 9	Mark Newman	Revisions or additions following modifications to the 1050 Buried Facilities Form to align documents.
8/3/2015	Attachment B	Butch McCoy	Corrected table.

Attachment A**One-Call Contact Information***

DELAWARE Miss Utility of Delmarva Center: 1-800-282-8555 or (800) 441-8355 www.missutility.net	New York City – Long Island One Call Center Center: 1-(800)272-4480 www.nycl1calldsi.com
INDIANA Indiana 811 (Indiana Underground Plant Protection Service, Inc.) Center: 1-800-382-5544 or (317) 842-8378 www.indiana811.org	NORTH CAROLINA North Carolina One-Call Center, Inc. Center: 1-800-632-4949 or (336) 855-7799 www.ncocc.org
KENTUCKY Kentucky 811 (Kentucky Underground Protection, Inc.) Center: 1-800-752-6007 or (502) 266-5677 www.kentucky811.org	OHIO Ohio Utilities Protection Services (OUPS) Center: 1-800-362-2764 www.oups.org Oil and Gas Producers Underground Protection Service Center: 1-(800) 925-0988 www.ogpups.com
LOUISIANA Louisiana One Call System, Inc. Center: (800) 272-3020 www.laonecall.com	PENNSYLVANIA Pennsylvania One Call System, Inc. Center: 1-800-242-1776 or (412) 464-7100 www.paonecall.org
MARYLAND Miss Utility of Delmarva Center: 1-800-282-8555 or (800) 441-8355 www.missutility.net Miss Utility Center: (800) 257-7777 www.missutility.net District of Columbia District One Call Center: 1-800-257-7777 www.missutility.net	TENNESSEE Tennessee 811 (Tennessee One Call System) Center: 1-(800) 351-1111 or (615) 367-1111 www.tnonecall.com VIRGINIA Miss Utility of Virginia Center: 1-800-552-7001 www.missutilityofvirginia.com
MISSISSIPPI Mississippi One Call System, Inc. Center: 1-(800) 227-6477 or (601) 362-4374 www.ms1call.org	WEST VIRGINIA West Virginia 811 or WV811 (Miss Utility of West Virginia, Inc.) Center: 811 or 1-800-245-4848 www.wv811.com
NEW JERSEY New Jersey One Call Center: 1-800-272-1000 (in state) or (732) 394-3000 www.nj1-call.org	
NEW YORK Dig Safely New York Center: 1-800-962-7962 www.digsafelynewyork.com	NATIONAL ONE CALL 811 or 1-888-258-0808**

*Information obtained from One Call System International at <http://www.cga-onecall.com/map/>

** Connects caller to the appropriate State One Call organization.


Attachment B
Plan Review Locations and Phone Numbers

Note: Mail all plans to the attention of the "Asset Management Department."

Company Name	Coverage Area (State/County)	Office Address	Contact Phone #
Columbia Gas Transmission (TCO)	DE – TCO New Castle	4800 Freemansburg Ave Easton PA 18045	610-865-9257
Crossroads Pipeline	IN – TCO Elkhart, Lake, LaPorte, Marshall, Noble, Porter, St. Joseph, DeKalb	589 North State Road Medina OH 44256	330-721-4163
Columbia Gas Transmission (TCO)	KY – TCO Bath, Bourbon, Bracken, Campbell, Carter, Clark, Clay, Estill, Fayette, Floyd, Johnson, Knott, Lee, Letcher, Lewis, Madison, Magoffin, Martin, Mason, Menifee, Montgomery, Morgan, Nicholas, Owsley, Pendleton, Pike, Robertson	1675 Muddy Creek Road Winchester KY 40391	859-745-6405
Columbia Gas Transmission (TCO)	KY – TCO Boyd, Greenup, Lawrence	485 Industrial Road St. Albans WV 25177-1831	304-722-8541
Columbia Gulf Transmission (CGT)	KY – CGT Bath, Boyd, Carter, Estill, Madison, Menifee, Montgomery, Powell, Rowan	1675 Muddy Creek Road Winchester KY 40391	859-745-6405
Columbia Gulf Transmission (CGT)	KY – CGT Adair, Allen, Casey, Garrard, Lincoln, Metcalfe, Monroe	5422 Green Grove Road Hartsville TN 37074	615-374-2165 Ext 2149

Company Name	Coverage Area (State/County)	Office Address	Contact Phone #
Columbia Gulf Transmission (CGT)	LA (Parishes) – CGT Acadia, Avoyelles, Cameron, Catahoula, East Carroll, Evangeline, Franklin, Iberia, Jeff Davis, Lafayette, Lafourche, LaSalle, Madison, Plaquemines, Rapides, St. Charles, St. Landry, St. Mary, Terrebonne, Vermilion	201 Energy Parkway Suite 100 Lafayette LA 70508	337-266-4695
Columbia Gas Transmission (TCO)	MD – TCO Allegany, Garrett, Washington	12001 Industrial Park Street Cumberland MD 21502	301-729-5624
Columbia Gas Transmission (TCO)	MD – TCO Cecil, Harford	4800 Freemansburg Ave Easton PA 18045	610-865-9257
Columbia Gas Transmission (TCO)	MD – TCO Baltimore, Howard, Montgomery	34646 Old Valley Pike Strasburg VA 22657	540-465-6441
Columbia Gulf Transmission (CGT)	MS – CGT Alcorn, Prentiss, Tippah, (northern) Union	5422 Green Grove Road Hartsville TN 37074	615-374-2165 Ext 2149
Columbia Gulf Transmission (CGT)	MS – CGT Calhoun, Grenada, Humphries, Isaquena, Leflore, Pontotoc, Sharkey, Sunflower, (southern) Union, Washington, Yalabousha	201 Energy Parkway Suite 100 Lafayette LA 70508	337-266-4695
Columbia Gas Transmission (TCO)	NC - TCO Northampton	1596 Baxter Road Petersburg VA 23875	804-733-2486
Columbia Gas Transmission (TCO)	NJ – TCO Gloucester, Hunterdon, Morris, Salem, Warren	4800 Freemansburg Ave Easton PA 18045	610-865-9257
Columbia Gas Transmission (TCO)	NY – TCO Broome, Chemung, Delaware, Orange, Rockland, Schuyler, Steuben, Sullivan, Tioga, Yates	36 Philo Road West Elmira NY 14903	607-739-4831

Company Name	Coverage Area (State/County)	Office Address	Contact Phone #
Columbia Gas Transmission (TCO)	NY – TCO Cattaraugus	315 Shady Rest Road Ellwood City PA 16117	724-758-5507
Columbia Gas Transmission (TCO)	OH – TCO Athens, Champaign, Clark, Clinton, (southern) Crawford, Delaware, Fairfield, Fayette, Franklin, Gallia, Greene, Hocking, Jackson, Knox, Lawrence, Licking, Madison, (eastern) Marion, Meigs, Montgomery, Morgan, Morrow, (northeastern) Muskingum, Pickaway, (southern) Perry, Ross, Scioto, Union, Vinton, Warren, Washington, (southeastern) Wyandot	301 Maple Street Sugar Grove OH 43155	740-746-2234
Columbia Gas Transmission (TCO)	OH – TCO Allen, (northern) Ashland, (northern) Crawford, Cuyahoga, Defiance, Erie, Geauga, Hancock, Hardin, Henry, Huron, Logan, Lorain, Lucas, (western) Marion, Medina, Ottawa, Paulding, Putnam, Richland, Sandusky, Seneca, Wood, (northern) Wyandot	589 North State Road Medina OH 44256	330-721-4163
Columbia Gas Transmission (TCO)	OH – TCO (southern) Ashland, Belmont, Coshocton, Guernsey, Holmes, (western) Monroe, Muskingum, Noble, (northeastern) Perry, (southern and eastern) Richland, Tuscarawas, (north and southwest) Wayne	8462 State Route 179 Lakeville OH 44638	419-827-2620

Company Name	Coverage Area (State/County)	Office Address	Contact Phone #
Columbia Gas Transmission (TCO)	OH – TCO (southeast) Columbiana, Jefferson	4115 Cork Bocktown Road Clinton PA 15026	724-223-3944
Columbia Gas Transmission (TCO)	OH – TCO (eastern) Monroe	950 Manifold Road Washington PA 15301	724-223-2789
Columbia Gas Transmission (TCO)	OH – TCO Carroll, Columbiana, Harrison, Mahoning, Portage, Stark, Trumbull	315 Shady Rest Road Ellwood City PA 16117	724-758-5507
Columbia Gas Transmission (TCO)	PA – TCO (northern) Pike, Wayne	36 Philo Road West Elmira NY 14903	607-739-4831
Columbia Gas Transmission (TCO)	PA – TCO Fayette, Greene, Westmoreland	950 Manifold Road Washington PA 15301	724-223-2789
Columbia Gas Transmission (TCO)	PA – TCO Allegheny, (southern) Beaver, Jefferson, Washington	4115 Cork Bocktown Road Clinton PA 15026	724-223-3944
Columbia Gas Transmission (TCO)	PA – TCO Armstrong, (northern) Beaver, Butler, Cameron, Centre, Clarion, Clearfield, Clinton, Elk, Indiana, Jefferson, Lawrence, Mc Kean	315 Shady Rest Road Ellwood City PA 16117	
Columbia Gas Transmission (TCO)	PA – TCO Bucks, Chester, Delaware, Lancaster, Lehigh, Montgomery, Monroe, Northampton, (southern) Pike,	4800 Freemansburg Ave Easton PA 18045	610-865-9257
Columbia Gas Transmission (TCO)	PA – TCO Adams, Bedford, Cumberland, (southeastern) Fayette, Franklin, Fulton, Somerset, York	12001 Industrial Park Street Cumberland MD 21502	301-729-5624

Company Name	Coverage Area (State/County)	Office Address	Contact Phone #
Columbia Gulf Transmission (CGT)	TN – CGT Davidson, Hardin, Lewis, Macon, Maury, McNairy, Sumner, Trousdale, Wayne, Williamson, Wilson	5422 Green Grove Road Hartsville TN 37074	615-374-2165 Ext 2149
Columbia Gas Transmission (TCO)	VA – TCO Alleghany, Augusta, Botetourt, Giles, Rockbridge	485 Industrial Road St Albans WV 25177	304-722-8541
Columbia Gas Transmission (TCO)	VA – TCO Albemarle, Chesapeake, Chesterfield, Culpeper, Dinwiddie, (southern) Fauquier, Goochland, Greene, Greensville, Hanover, Henrico, Isle of Wight, James City, Louisa, Madison, Newport News, Orange, Powhatan, Prince George, Prince William, Suffolk, Southampton, Surry, Sussex	1596 Baxter Road Petersburg VA 23875	804-733-2486
Columbia Gas Transmission (TCO)	VA – TCO Fairfax, (northern) Fauquier, Page, Rockingham, Shenandoah, Clarke, Loudoun, Warren	34646 Old Valley Pike Strasburg VA 22657	540-465-6441
Columbia Gas Transmission (TCO)	WV – TCO (western) Braxton, Calhoun, Clay, (southern) Gilmer, Jackson, Kanawha, Roane, Wirt, Wood,	485 Industrial Road St Albans WV 25177	304-722-8411
Columbia Gas Transmission (TCO)	WV – TCO (eastern) Braxton, Grant, Lewis, Pendleton, Pocahontas, (southern) Preston, Randolph, Tucker, Upshur, Webster	Route 3 Box 216 Ward Road Elkins WV 26241	304-635-2100

Company Name	Coverage Area (State/County)	Office Address	Contact Phone #
Columbia Gas Transmission (TCO)	WV – TCO Boone, Cabell, Fayette, Greenbrier, Lincoln, Logan, Mason, McDowell, Mercer, Mingo, Monroe, Putnam, Raleigh, Summers, Wayne, Wyoming	485 Industrial Road St Albans WV 25177	304-722-8541
Columbia Gas Transmission (TCO)	WV – TCO (northern) Gilmer, Harrison, Marion, Tyler, Wetzel, (western) Monongalia, Doddridge	950 Manifold Road Washington PA 15301	724-223-2789
Columbia Gas Transmission (TCO)	WV – TCO Brooke, Hancock, Marshall, Ohio	4115 Cork Bocktown Road Clinton PA 15026	724-223-3944
Columbia Gas Transmission (TCO)	WV – TCO Mineral, (eastern) Monongalia, (northern) Preston	12001 Industrial Park Street Cumberland MD 21502	301-729-5624
Columbia Gas Transmission (TCO)	WV – TCO Hampshire, Hardy	34646 Old Valley Pike Strasburg VA 22657	540-465-6441
Columbia Gulf Transmission (CGT)	WY – CGT Uinta	201 Energy Parkway Suite 100 Lafayette LA 70508	337-266-4695
Columbia Midstream Group (CMG)	OH - Columbiana, Mahoning	315 Shady Rest Road Ellwood City PA 16117	724-758-5507
Columbia Midstream Group (CMG)	PA - Lawrence, Mercer, Washington	4115 Cork Bocktown Road Clinton PA 15026	724-223-3944



Attachment C

Requirements for Submission of Design Plans

1. Permittee shall arrange an on-site visit with a CPG Field Representative for field determination of pipeline location and depth to be recorded on the design plans for submission. This can be coordinated through the national "Call Before You Dig" hotline, 811.

Note: Test Holes(s) may be required by CPG at Permittee expense to verify exact location and elevation of pipeline facilities, or to locate the edge of an existing casing. You may be required to provide excavation equipment (at your expense) in order to assist the CPG Field Representative in accurately locating the pipeline.

2. The location along with the corresponding depth of the pipeline(s) shall be recorded by the Permittee. CPG will consider site conditions and pipeline(s) location to determine the number of measurement locations required. At a minimum, the pipeline(s) shall be located at each proposed road or utility crossing, drainage channel or ditch, areas of proposed grade change within the pipeline right-of-way, and wherever the pipeline changes direction (angle points.)
3. Using the pipeline location data, Permittee shall accurately show CPG pipeline(s) on the design plans to be submitted. Include all reference and location information for each verification site on the design plan, including the date and the name of the CPG Field Representative who performed the field work.
4. The pipeline location data must be shown on individual drawings depicting the existing site conditions and the proposed site conditions. Pipeline facilities shall be highlighted in yellow. All drawing sheets corresponding with CPG facilities shall be identified/ listed within a design plan transmittal letter submitted within each drawing package.
5. CPG pipeline(s) shall be indicated on all applicable plan sheets by pipe diameter and labeled, "CPG Gas Transmission Pipeline".
6. Permittee shall add CPG to the Utilities List and include the name and phone number of the CPG Land Agent assigned to the project. (Note: for Land Agent name, call the appropriate CPG office, as listed in Attachment B)
7. Permittee shall indicate the following information on the design plans: [1] ground disturbances (blasting, seismic testing, pile driving, jack hammering, etc.) within 300 feet of the pipeline(s); [2] proposed location(s) where construction equipment may cross the pipeline right(s)-of-way; [3] structure setback distances from the pipeline ROW; [4] proposed landscaping within the pipeline ROW; [5] any proposed fencing within the pipeline right-of-way; and [6] any proposed utility crossings.

8. If the proposed drainage pattern of the existing site will be altered in any way that impacts the pipeline right-of-way, the Permittee shall submit a drainage plan that specifically identifies new flow paths and all inlet/outfall/collection points.
9. Permittee shall include/incorporate the applicable portions of the CPG right-of-way Use Specification as a part of the final design plans.
10. For property improvements that involve grade/pavement alterations, road work (new construction or improvements of existing), utility crossings (buried and overhead), or other subsurface or on-surface structure installations within the CPG right-of-way, the following are required for plan submission:
 - A. Prepare a separate plan and profile drawing of CPG pipeline(s) for the existing and the proposed conditions for the project.
 - B. Include sub-grade details that show materials and the thickness of each layer/course.
 - C. Indicate the amount of existing cover that will be removed from the pipeline(s). Indicate the amount of cover that will be added over the pipeline(s). Indicate the proposed finished/final grade amount of cover over the pipeline(s).
 - D. Show the clearances between CPG pipeline(s) and any existing and new buried or overhead utilities that cross the pipeline right-of-way.
 - E. Show the clearances between CPG pipeline(s) and each proposed substructure at the two closest reference points.
 - F. For any utility to be installed via boring, drilling, or tunneling, include a detailed procedure and profile drawing of this work with the design plans for CPG review and permitting. Note: "Blind" boring is not permitted. CPG pipeline(s) must be exposed during the bore operation to ensure that the bore head crosses safely underneath the pipeline(s).
 - G. Indicate any areas of disturbance or other work that will require CPG pipeline(s) to be exposed in order to perform the work.
11. The following "Design Plans Submission Checklist" shall be signed, dated, and submitted within the design submittal package and sent to CPG for review. Mail one full size set and one reduced size (11"x17") set of design plans to the CPG office. Inquire with the local office on whether Electronic Submissions will be accepted.



DESIGN PLANS - SUBMISSION CHECKLIST

Project Name: _____

Project Location: _____

GPS Coordinates: _____

Developer's Name: _____

Address: _____

Phone Number: _____

Our project involves the following impacts to CPG facilities:

Cover, grading, and drainage pattern changes

Aboveground and/or underground structures

Road, driveway, sidewalks, and parking areas

Utility crossings including gas, water (steam), sewer (storm & sanitary), electrical, fiber-optic, and communications cables

Temporary access roads for the crossing of heavy/construction equipment

Farming and field tile

Construction-induced vibrations

Blasting operations (attach completed BLASTING DATA SHEET)

Seismic vibrating operations (attach SEISMIC VIBRATING PLAN)

Exposure of the pipeline (attach SUPPORT PLAN)

Boring, drilling, or tunneling near the pipeline (attach DRILL PLAN)

Other: _____

CPG pipeline location performed by:

_____ / _____ / _____

Name of CPG Employee _____ Date of Pipeline Locating Activity _____

Attach a copy of the field data provided by Company representative

Signature: _____ Date: _____

Print Name: _____

Title: _____

Email: _____

OMISSION OF ANY INFORMATION REQUESTED ABOVE WILL DELAY YOUR DESIGN PLAN REVIEW. CPG requires a minimum of 60 days for technical review upon receipt of complete and accurate design plans.

CPG COMPLETE THIS SECTION

Received By: _____ Date Received: _____

Pipelines Involved: _____ UTM Map No: _____



Attachment D – Field Tile Agreement

Field Tile Agreement

Pipeline _____

UTM _____

Crossing Pipeline Station _____

Longitudinal installation from Pipeline Stations _____ to _____

ROW # _____

Parcel # _____

Property Address _____

Landowner _____

Address _____

Home Phone _____

Cell Phone _____

Email _____

When notified by CPG of an upcoming project involving excavation of the pipeline, Landowner agrees to divert or stop the flow of water in the field tile (drainage pipe) located within 25 feet of the CPG pipeline by a date specified by CPG. Landowner further agrees to, at Landowner's expense, make repairs to any field tile damaged as a result of CPG's operations, maintenance or construction activities. Landowner agrees to indemnify and hold harmless, CPG against any direct damage to field tile and any indirect damage or loss resulting from the temporary loss of the use of the field tile.

Landowner

_____ (Signature)

_____ (Printed name)

_____ (Date)



Attachment E - Residential/Commercial Concrete Driveway within CPG ROW

Control Joint Depth: Joints can be constructed either by forming, hand tooling them in fresh concrete, or cutting them into cured concrete with a saw. The width of these joints should be between one-sixteenth and one-quarter inch, depending on the method used in forming them.

Subsection Size: Each concrete subsection is 2.5' by 3' and approximately 4" thick (not to exceed 5" thick). This yields the total volume equal to 2.5 cubic feet. Assume cured concrete weighs approximately 150 lbs. per cubic foot; this makes the subsection weigh approximately 375 pounds.

Permittee must follow specifications provided in the drawings unless otherwise permitted by CPG.

SPECIFICATIONS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
<ul style="list-style-type: none"> • THIS STANDARD IS LIMITED TO RESIDENTIAL USE ONLY AND DOES NOT ALLOW FOR HEAVY VEHICULAR TRAFFIC SUCH AS CARS, TRUCKS, FIRE TRUCKS, ETC. ETC. • STEEL OF ANY KIND, REBAR, MESH, STEEL FIBER, ETC. CANNOT BE USED IN THE CONCRETE MIXTURE. THIS INCLUDES STEEL DOWELS BETWEEN EXPANSION JOINTS. • SECTIONS OF CONCRETE BETWEEN THE EXPANSION JOINTS ARE TO BE SAW CUT OR HAND TOOLED DURING THE CONCRETE'S PLACEMENT TO A DEPTH OF $1/3$ THE TOTAL DEPTH OF THE DRIVEWAY. THESE JOINTS SHOULD NOT EXCEED $1/2$ IN. WIDTH. • SLAB THICKNESS FOR RESIDENTIAL USE, SHOULD BE APPROXIMATELY FOUR (4) INCHES, NOT TO EXCEED FIVE (5) INCHES. THE SIZE OF THE SAW CUT OR HAND TOOLED SECTIONS BETWEEN THE TEN (10) FEET CONTROL JOINTS MUST BE NO LARGER THAN 2$\frac{1}{2}$ FEET BY 3 FEET, AS SHOWN ON THE DRAWING. • CONCRETE BRICK PAVERS ARE ACCEPTABLE, PROVIDED NO STEEL IS USED IN ITS PREPARATION AND MAXIMUM SIZE OF THE REMOVABLE SUBSECTIONS DOES NOT EXCEED 2$\frac{1}{2}$ FEET BY 5 FEET. • CONTOUR ADJACENT GRADE TO PREVENT WATER FROM FLOWING ONTO CONCRETE. • THE REQUIREMENTS CONTAINED IN THIS STANDARD MUST BE ADHERED TO FOR ANY WORK WITHIN THE CPC RIGHT-OF-WAY. • CPC SHOULD BE CONTACTED PRIOR TO ANY EXCAVATION TO LOCATE THE EXISTING PIPELINE AND ITS DEPTH OF BURRY. ALSO, THIS UTILITY SHOULD BE CONTACTED TO LOCATE ANY OTHER BURIED UTILITY LINES. EXCAVATION SHOULD BE MADE CAREFULLY. THE DIRECTION OF EXCAVATION SHOULD BE REVERSED TO PREVENT EXPOSURE AND POSSIBLE DAMAGE TO EXISTING PIPELINES. 																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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SPECIFICATIONS	
<ul style="list-style-type: none"> • THIS STANDARD IS LIMITED TO COMMERCIAL AND INDUSTRIAL USE ONLY. • STEEL REINFORCEMENT, REBAR, MESH, STEEL, FIBER, ETC., IS ONLY ALLOWED WITHIN THE CONCRETE PAD. STEEL DOWELS ARE NOT ALLOWED BETWEEN CONCRETE PADS OR CONTINUOUS Poured CONCRETE SECTIONS. • CONCRETE PAD DIMENSION & THICKNESS SHALL BE APPROVED BY CPG PIPELINE SERVICES ENGINEER. EVALUATION OF PAD, INCLUDING STEEL, CONCRETE DENSITY AND TOTAL WEIGHT OF PAD, INCLUDING STEEL. • TOTAL WEIGHT OF CONCRETE PAD SHALL BE LIMITED TO TOTAL LIFTING CAPACITY OF OFF-SITE EQUIPMENT ROUTINELY USED FOR EXCAVATING PIPELINE. • EACH CONCRETE PAD SHALL HAVE A MINIMUM OF 3 LIFTING DEVICES INSTALLED ON EACH SIDE, EQUALLY SPACED AND DESIGNED FOR THE TOTAL WEIGHT OF CONCRETE PAD. • INSTALLATION OF EXPANSION CONTROL, JOINT SPARKING MATERIAL IS REQUIRED BETWEEN EACH CONCRETE PAD AND CONCRETE PAD - CONTINUOUS Poured CONCRETE JOINTS. • CONCRETE PAD SHALL BE INSTALLED ON TOP OF LEVEL GROUND TO INSURE CONCRETE PAD HAS FULL CONTACT WITH GROUND SURFACE. COMPACT CRUSHED MATERIAL MAY BE REQUIRED UNDER CONCRETE PAD TO INSURE LOAD TRANSFER. • THE REQUIREMENTS CONTAINED WITHIN THIS STANDARD MUST BE ADHERED TO FOR ANY WORK WITHIN CPG RIGHT OF WAY. • CONTOUR ADJACENT GRADE TO PREVENT WATER FROM FLOWING TOWARD CONCRETE PAD. • CPG SHALL BE CONTACTED PRIOR TO ANY EXCAVATION TO LOCATE THE EXISTING PIPELINES AND ITS DEPTHS OF BURY. ALSO, ONE-CALL GRID SHOULD BE CONTACTED TO LOCATE ANY OTHER BURIED UTILITY LINES. EXCAVATION SHALL BE MADE ONLY AT THE DIRECTION OF A CPG REPRESENTATIVE TO PREVENT EXPOSURE AND POSSIBLE DAMAGE TO EXISTING PIPELINES. • CONTINUOUS Poured SECTIONS MUST STOP AT EACH EDGE OF PIPELINE ROW. 	
<img alt="Technical drawing showing a plan view of a pipeline. It features a vertical line labeled 'ELEVATION' with a horizontal line extending from it. A circle labeled 'EXPANSION CONTROL JOINT' is shown at the top. A horizontal line labeled 'EXPANSION CONTROL JOINT' is shown at the bottom. A vertical line labeled 'GRADE' is shown in the center	



Attachment F- Equipment Crossing Data Sheet

Operator / Contractor (Complete this Section):

Date: _____

Contact:	Phone:
Company:	Location of Work (include vicinity map)
Address:	
City, State, Zip:	Temporary Impact <input type="checkbox"/> Permanent Impact <input type="checkbox"/> Logging <input type="checkbox"/>

Equipment Information		Equipment #1	Equipment #2	Equipment #3	Equipment #4
Type of Model of Equipment					
Total Weight – Fully Loaded					
Track	Width of Track Shoe				
	Length of Track on round				
Wheel	Number of Wheels				
	Number of Axles				
Pavement Type / Thickness					
Soil Type	Clay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Wet Clay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Sand & Gravel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Wet Top Soil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Equipment Information provided by: _____ (signature) Date: _____

CPG (Complete this Section):

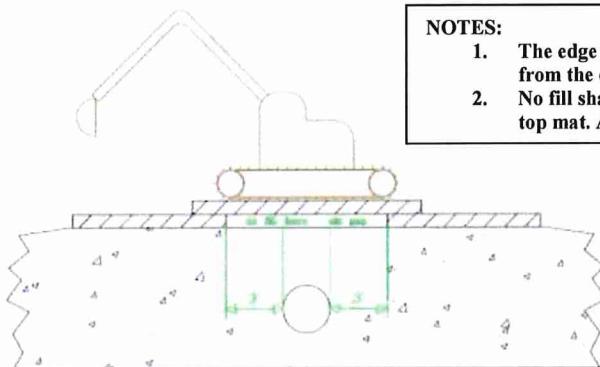
Field Office:	Contact:			Asset Group:
Phone:	Township/District:			State:
Pipeline Name / Number				
Pipeline MAOP				
Inventory Map #				
Inventory Station #				
GPS Latitude				
GPS Longitude				
Pipe Size				
Grade / Wall Thickness				
Coating Type / Class Location				
Coupled, Welded or Threaded				
Bored or Open Cut/Rock				
Pipe Depth				
Evaluation Results % SMYS				

Crossing Plan Evaluated by: _____ Date: _____

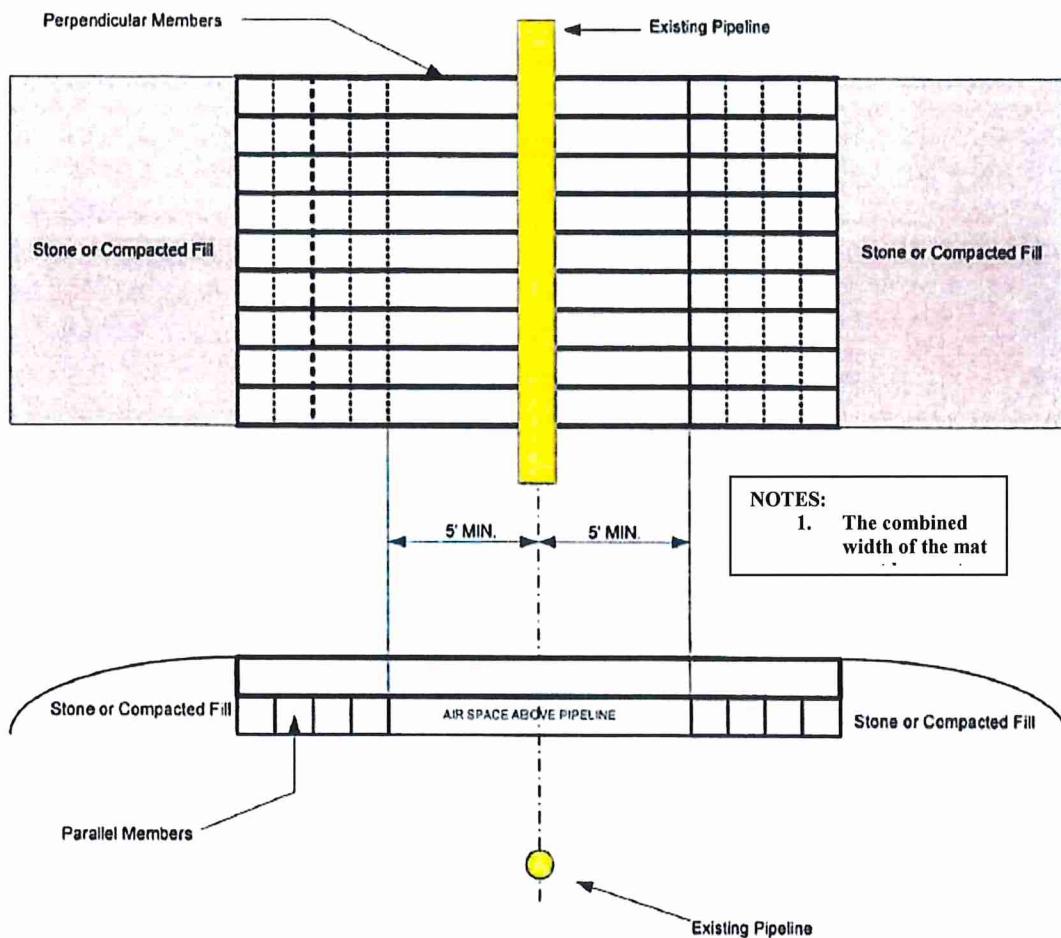


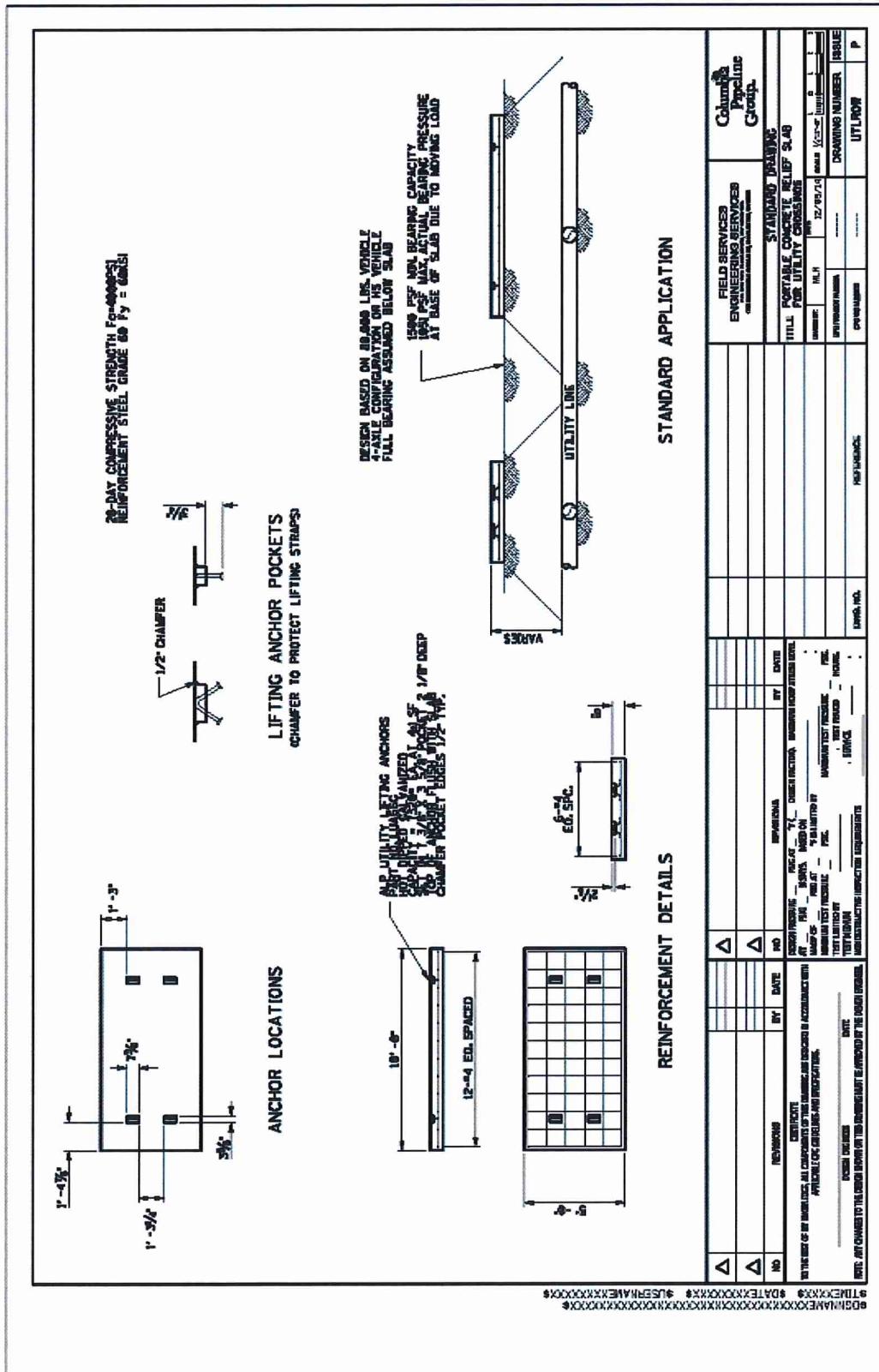
Attachment G – Temporary

Example 1 - Temporary Wooden or Permanent Crossings



Example 2 – Temporary Wooden Timber Utility Crossing





Example 3 – Portable Concrete Relief Slab

DRAFTED IN IBE NO : 220 003 000

EFFECTIVE DATE: 8/05/2015

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THE CONTROL VERSION OF THIS DOCUMENT IS AVAILABLE ON THE CPG STANDARDS & PROCEDURES SITE.
COLUMBIA PIPELINE GROUP



Attachment H – Blasting Data Sheet

Section to be completed by Blaster													
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Blasting Contractor Information</th> </tr> </thead> <tbody> <tr> <td>Company</td> <td></td> </tr> <tr> <td>Contact</td> <td></td> </tr> <tr> <td>Address</td> <td></td> </tr> <tr> <td>Telephone</td> <td></td> </tr> <tr> <td>Blasting Permit #</td> <td></td> </tr> </tbody> </table>		Blasting Contractor Information		Company		Contact		Address		Telephone		Blasting Permit #	
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Company Hiring Blasting Contractor													
Company													
Contact													
Address													
Telephone													
1 Project Name: _____													
2 Purpose of Blasting: _____													
3 Type of Explosive: _____													
4 Planned Blasting Date: _____													
5 Number of Charges in Front Row of Explosive Grid _____													
6 Number of Rows Making Explosive Grid _____													
7 Spacing Between Charges in Explosive Line _____ feet													
8 Spacing Between Explosive Line _____ feet													
9 Weight of Each Charge in Explosive Grid _____ lbs													
10 Distance of Nearest Row to Pipeline _____ feet													
11 Angle Between Pipe and Grid _____													
12 Number of Holes Detonated During Shot _____													
13 Blaster's calculated Peak Particle Velocity (PPV) at nearest pipeline(s) _____ inches per second _____ inches per second													
Select Blast Pattern:	Single Point Charge _____	Line Charge _____	Grid Charge _____										
Select Blast Orientation to Pipeline:	Parallel _____	Angled _____	Perpendicular _____										
Blaster's sketch - page 2 (MUST BE INCLUDED FOR REVIEW)													

Section to be completed by Gas Company																									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Gas Company Information - Engineering Services Personnel</th> </tr> </thead> <tbody> <tr> <td>Pipeline Name</td> <td></td> </tr> <tr> <td>Diameter</td> <td></td> </tr> <tr> <td>Wall Thickness</td> <td></td> </tr> <tr> <td>Grade</td> <td></td> </tr> <tr> <td>MAOP</td> <td></td> </tr> <tr> <td>Coupled or Welded</td> <td></td> </tr> <tr> <td colspan="2"> Evaluation Results - Engineering </td> </tr> <tr> <td>Percent SMYS</td> <td></td> </tr> <tr> <td>Pass (Y / N)</td> <td></td> </tr> <tr> <td>Blasting Plan Evaluated by:</td> <td></td> </tr> <tr> <td>Date Evaluated:</td> <td></td> </tr> </tbody> </table>		Gas Company Information - Engineering Services Personnel		Pipeline Name		Diameter		Wall Thickness		Grade		MAOP		Coupled or Welded		Evaluation Results - Engineering		Percent SMYS		Pass (Y / N)		Blasting Plan Evaluated by:		Date Evaluated:	
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Blast Results - Operations Pipeline Personnel	
Name of On Sight Inspector	
One-Call Ticket Number	
Leak Survey Date	
Leakage (Y / N)	
Sketch - To be completed by Blaster	
Project Name:	
Sketch Prepared By:	
Date:	
Blaster's sketch - show orientation of blasting grid to pipeline(s).	
Comments:	
List of Attachments (if any):	

Attachment I Waiver Request Form


Right-of-Way Use Procedure Waiver Request Form

This form is for use with [**Procedure 220.003.009 Right of Way Use Procedure**](#) and should be used only where a deviation from the procedure requirements is requested.

This section to be completed by Columbia Pipeline Group Operations or Land Representative:

Pipeline: [Type here]

UTM: [Type here]

Pipeline Station: [Type here]

GPS Coordinates:

Latitude: [Type here]

Longitude: [Type here]

ROW #: [Type here]

Parcel #: [Type here]

State/County or Parish: [Type here]

Property Address: [Type Here]

Landowner Name: [Type Here]

Landowner Address: [Type Here]

Landowner Home Phone: [Type Here]

Landowner Cell Phone: [Type Here]

Landowner Email: [Type Here]

Contractor Name: [Type Here]

Contractor Phone: [Type Here]

Contractor Email: [Type Here]

Requestor Name: [Type Here]

Date of Request: [Type Here]

Requestor Title: [Type Here]

Requestor Email: [Type Here]

Attached the following documents to the Waiver request for review as it applies:

- Form 1050P17 – Location of Buried Facilities (*Required*)
- Design Plan – Submission Checklist and supporting documents
- Photographs
- Drawings

A request for a waiver will alter the following CPG requirements (check all that apply):

- Backfilling operations: [\[Type here\]](#)
- Cover, grading, and drainage requirements: [\[Type here\]](#)
- Aboveground/underground structures, Gardening and Landscaping: [\[Type here\]](#)
- Field Tile (Attach Field Tile Agreement): [\[Type here\]](#)
- Road, driveways, sidewalks, parking areas and walking/bike paths: [\[Type here\]](#)
- Utility crossings Natural Gas, Hazardous Liquid, or Petro Steam Water Sewer
 Storm & Sanitary Electrical Fiber-Optic Communication – Cable/TV Conduit: [\[Type here\]](#)
- Construction-induced vibrations: [\[Type here\]](#)
- Blasting operations (Attach completed Blasting Data Sheet): [\[Type here\]](#)
- Seismic vibrating operations (Attach Seismic Vibrating Plan): [\[Type here\]](#)
- Exposure of the pipeline (Attach Support Plan): [\[Type here\]](#)
- Boring, drilling, or tunneling near the pipeline (Attach Drill Plan): [\[Type here\]](#)
- Storage Well
- Other (Attach supporting Documents): [\[Type here\]](#)

Provide a justification for the Waiver: [\[Type here\]](#):

This section to be completed by Columbia Pipeline Group Approvers:

Operations Manager

Signature

Print Name

Date

Land Manager

Signature

Print Name

Date

Engineering Services Manager or Manager of Well Services

Signature

Print Name

Date

Vice President, Safety, Training, and Natural Resource Management

Signature

Print Name

Date

Request:

Approved

Not Approved (with comments)

Reason the Waiver was not approved: [\[Type here\]](#)

Waiver request records are maintained by Land Services. This form with supporting documentation shall be stored in [Online Land System](#) and [Maximo](#)

Comments: [\[Type here\]](#)